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ABSTRACT

The basis for the assessment process in this project is that structured situations within curriculum areas will yield vocational information (skill and behavioral) that has a direct and indirect relationship to occupational areas in the world of work. Thus, with the assistance of school assessment teams, seven situations were identified and analyzed. Several sets of skills and behaviors related to the task to be performed were identified. These work-related skills and behaviors were grouped into categories such as: (1) work adjustment; and (2) specific skills and behaviors related to occupational areas. In field tests, the information was collected on structured rating instrumentation, through critical observation, by teachers or staff persons supervising the student's performance on the task. Norming criteria for rating performance on the task was directly related to classroom performance of students doing the task. Evaluation of a completed rating form revealed whether the student was able to complete the task, in which areas the student needed assistance, or if and what abilities and characteristics he/she possessed to complete the task or other related tasks of a similar complexity. Occupational relationships can be established directly for the assessment packets through use of any existing exploratory guide. (RL)

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VOCATIONAL ASSESSMENT OF
SPECIAL NEEDS INDIVIDUALS
PROJECT

INSTRUMENTATION
FOR
SITUATIONAL ASSESSMENT

FOR FIELD TESTING ONLY

Funded by

Project Number 80-805-605-027-7

Division of Occupational Education
Commonwealth of Massachusetts

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TM 810 041

INSTRUMENTATION FOR SITUATIONAL ASSESSMENT

Undertaken For The

"VOCATIONAL ASSESSMENT FOR SPECIAL NEEDS PROJECT"

#80-805-605-027-7

Submitted to

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Project Director

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FOR FIELD TESTING ONLY

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INTRODUCTION

ASSUMPTIONS:

This project is based on the following assumptions:

1. A given task/lesson in a mainstreamed curriculum area can be analyzed to derive information about occupational characteristics and related work behaviors, interests and temperaments.
2. If a student in the middle school or junior high school is able to perform a variety of tasks/lessons in several classroom sites at his/her grade level, that student demonstrates he/she is performing at grade level in those areas.
3. If the student has difficulty with, or cannot perform, the operation of a step or steps of a task/lesson which has been analyzed, it should be possible to identify the area of difficulty, which factors are involved, and whether the difficulty is major or minimal.
4. As more learning experiences in classroom areas are included in a situational assessment, the information on a student's performance ability becomes more reliable.
5. Difficulties which are observed and analyzed can be used to determine the need for remediation and/or modification in reading, language arts, math, perceptual motor tasks, physical movement and behaviors.
6. These areas are directly related to occupational factors and can be used to develop an Individual Student Cluster Profile to be used in developing a vocational plan.

It could be argued that the total educational process supports the above assumptions because approximately ninety per cent of the student population acquire those characteristics necessary for achieving employability. The focus of this project could be described as taking off the cover and observing the process, and identifying those points at which five per cent of the population are having difficulty developing skills which are directly related to employability factors.

Since the process works for ninety per cent of the student population, we can infer, for that population, that there is a correlation between the educational process and employability. To say otherwise would be to imply that the educational process has little or no effect on a person's ultimate ability to satisfactorily perform the tasks of a job or series of job positions.

One could further adopt the goal of increasing the competencies of the student with special needs to the highest level possible in order to:

(1) Achieve the maximum number of occupational choices.

(2) Make possible, through a maximum number of occupational choices, a greater variety of life styles choices.

It would almost appear that the above statements were truisms, were it not for the fact that five to ten per cent of the student population have difficulty achieving employability.

MODEL PROCESS MAP:

Because of the direct correlation between the educational process and vocational development, analyzing performance ability lends itself to assessment and evaluation in developing vocational components in the I.E.P. There are five areas that represent possible sites for collecting assessment information as follows:

Curriculum Areas
Prevocational Exploration
Vocational Schools - Exploration
In School Job Tryout
Community Job Tryout

Curriculum areas probably are the most important site for collecting information, since most occupationally related skills are acquired in the classroom. The importance of using the other four areas is obvious because they lend themselves to more specific or indepth assessment of particular variables or collection of variables. This project presently is field testing the instrumentation in the classroom and is expanding into the four remaining areas.

Once information is collected, a factor analysis is used to record information relating to:

Skill Factors
Behavior Factors
Interest Factors
Temperament Factors

At this point, either further information can be collected, or the process can move to the development of the Individual Education Plan.

A Remediation/Modification Matrix is included in the instrumentation to correlate assessment data and other sources of information (i.e., testing, diagnostic evaluation, specialists' recommendations) to the Individual Student Cluster Profile. It is necessary, at this point, to explain the coding process used to identify occupational characteristics. The following table is used to illustrate the significant relationships.

Remediation/Modification Matrix		Individual Student Occupation Profile
(Learning Style)		Reasoning
Reading	V-R	Verbal-Reading
Language Arts	V-S	Verbal-Speaking
	V-W	Verbal-Writing
Math	N	Numerical
Perceptual/Motor	S	Spatial Perception
	P	Form Perception
	Q	Clerical Perception
	K	Motor Coordination
	F	Finger Dexterity
	M	Manual Dexterity
	E	Eye Hand (Foot)
	C	Color Discrimination
Physical Movement	1.	Strength
	2.	Climbing/Balancing
	3.	Stooping/Kneeling/Crouching/Crawling
	4.	Reaching/Handling/Fingering/Feeling
	5.	Talking/Hearing
	6.	Seeing

The above perceptual/motor and physical demand factors are used in the

World of Work. Each of the factors is an independent function that is both measurable and observable. Fine and gross motor skills are a combination of one or more of the factors in both groups. For example, gross motor could include walking, sitting, standing, crouching, crawling, kneeling, etc. Fine motor could include handling, fingering, finger dexterity, eye/hand/foot co-ordination, etc.

Both the Remediation/Modification Matrix and the Individual Student Cluster Profile should indicate either the need for more information or indicate appropriate areas to be considered for implementation. Furthermore, measurement of progress in areas of difficulty leads to the revision of both instruments.

It is important that remediation be seen as the preferable alternative, whenever possible. Remediation raises the ability of the student with special needs; modification removes the areas of difficulty while maintaining the student's level of skill.

Once the type of program/services has been determined, follow-up of progress is important. Both the Remediation/Modification Matrix and Individual Student Cluster Profile will change since ideally those areas of difficulties will be eliminated in as many cases as possible. If not, then the revision of the instruments should indicate a need for further decision making.

Finally, the process should lead to four possible alternatives. The student may require or choose further training; be ready for employment; require modified employment; need further services from an appropriate agency. Any of the four alternatives should not be considered until the student is ready to terminate the formal educational process.

INSTRUMENTATION:

The model involves three sets of instruments which follow and are described more fully in the instructions for use.

Assessment Instruments

Task Analysis
Skill Performance Analysis
Behavior Performance Analysis
Interest Preference Checklist
Temperament Adaptability

Evaluation Instruments

Skill Factor Analysis
Behavior Factor Analysis
Interest Factor Analysis
Temperament Factor Analysis

Decision Making Instruments

Remediation/Modification Matrix
Individual Student Cluster Profile

The most critical step involves the curriculum analysis which is converted into a task analysis. Once this is done, the task analysis can be analyzed to determine the variables which can be stated as functions used in performing the task and which become observable. This step involves:

Steps in the Lesson Unit
Instructional Strategies
Instructor Role
Factors

The Task Performance Analysis is used to record whether or not the student completed each step in the task, and whether the student had problems with a description of the difficulty. Also, any modification of the step is included, as well as the variables in the step.

The Behavior Performance Analysis focuses on three areas:

1. Approach to Task
2. Relationship to Task Environment
3. Production

These three areas represent twelve general work readiness behaviors that are specific to any task, activity, job, etc. This analysis is specific to the task since the behaviors are directly related to the task performance. As in the case of the Skill Performance Analysis, a description of the behavior as it was observed, as well as the number of occurrences, is required.

All occupations will involve one or more of the ten standard interest factors included as a checklist at the end of this packet. Interests are defined as the predominant work activities encountered in performing a task or job position. The interest or work activities in the selected task might be related to drawing in perspective as follows:

Activities involving communication of ideas and information.

Activities involving creative thinking.

In this case, the student by completing the predominant or main step in a task communicates and is involved in creative thinking by adding as many shapes as possible, using the two point method in drawing in perspective.

In assessing interests, the instructor needs to explore with the student his/her feelings about doing that step and/or activity. It is critically important that the instructor not use words which have a value content. All questions should be neutral in order not to bias the student's response. For example, the instructor might ask and encourage response to the following questions:

"How did you feel about doing this activity?"

"How did you feel about copying the shapes from the board?"

"How did you feel about drawing figures on your own?"

"How would you feel about doing this all day?"

The student will also demonstrate either interest or lack of interest by comments and behaviors which should be noted and followed up by asking the student the above questions.

It is important not to confuse adequate performance of the task with preference for related interests. Many people are able to work successfully for long periods of time without liking what they are doing.

Temperaments represent the adaptability required to complete a task or to perform the predominant work activities in a job position. It is important to recognize the difference between temperaments and interests. An interest is a preference for a work activity; a temperament is the ability to adjust to factors in a work situation. The ability to adapt to predominant factors in work situations also distinguishes between an interest being a vocational or avocational choice. For example, one might like to paint and not have to adapt to all of the temperaments related to working as a commercial artist. Also, a person may not like a particular work activity but is able to adapt to it.

All occupations will involve one or more of the ten standard temperament factors included as a checklist at the end of this packet. Using the example, "Drawing in Perspective", the predominant temperaments would be:

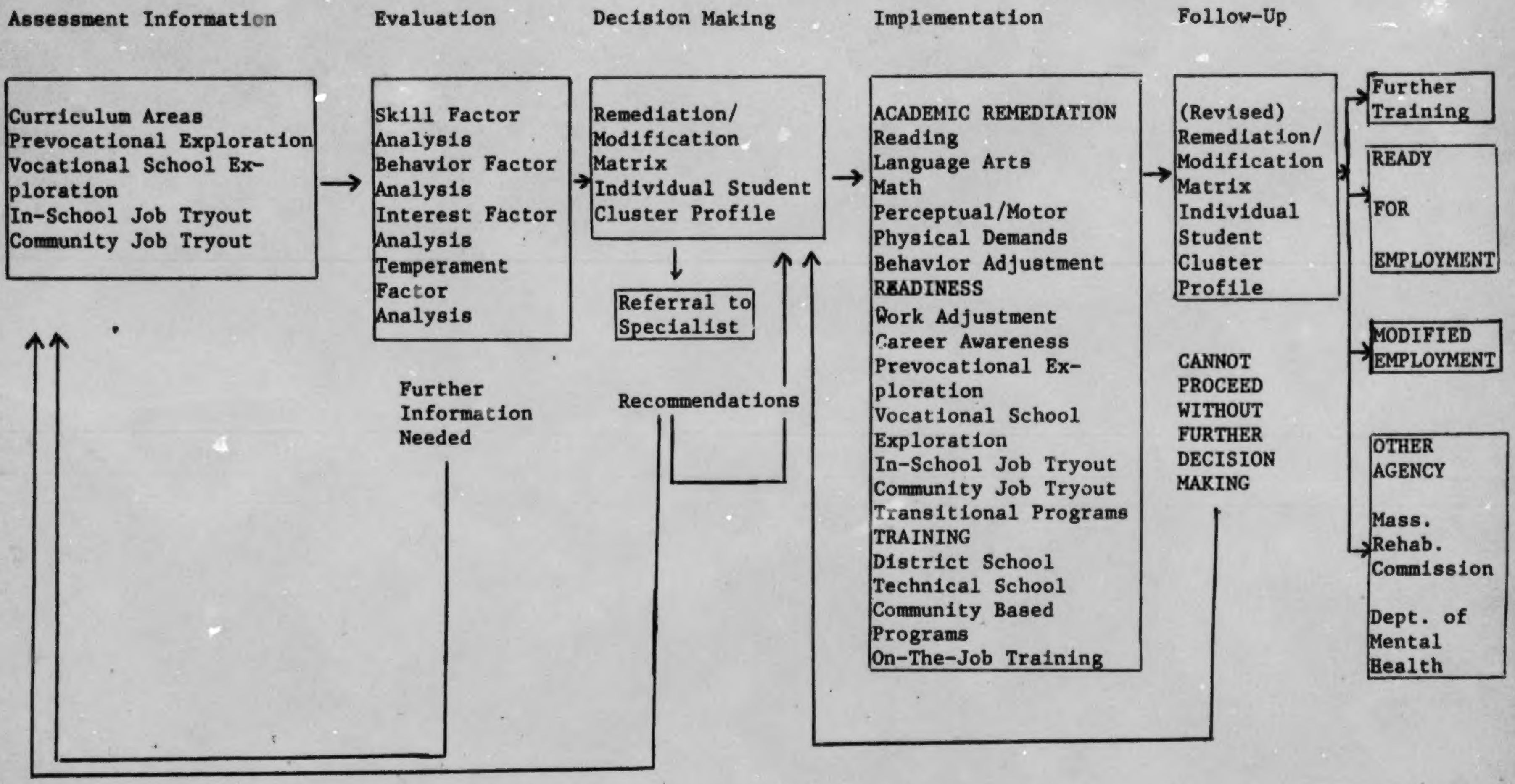
Planning and directing an entire activity
Interpreting and expressing feelings, ideas, or facts
Making decisions using personal judgement

In this case, the student in doing the task plans out the work involving copying shapes and/or figures on a blank sheet of paper relying on the instructor for assistance rather than direction. The student also expresses on paper his/her interpretation of the task assigned. Finally, the student will use his/her own personal judgement in making decisions as to how to proceed with the task, even though the teacher's assistance may be sought for clarification.

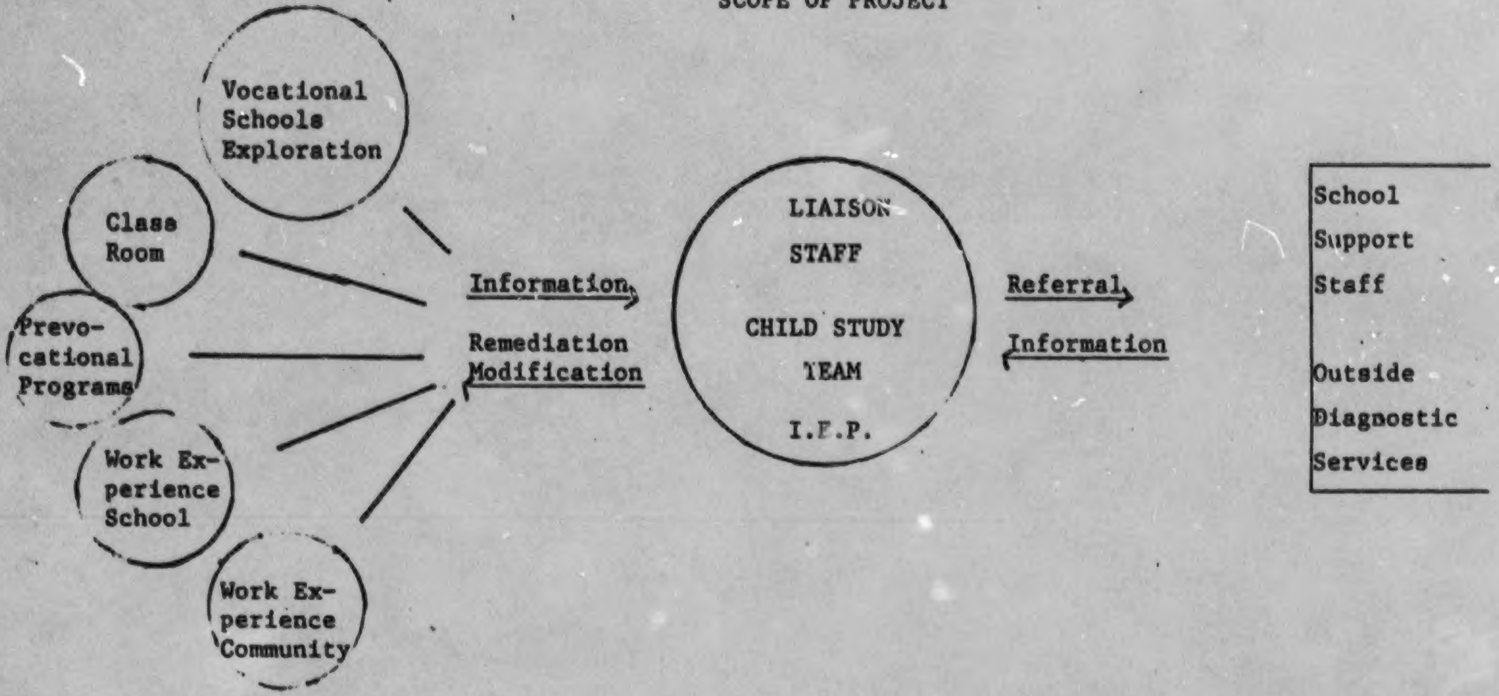
As in the case of interests, the instructor needs to explore with the student his/her reaction to the temperaments required to do the task. The inability to adapt to doing the task will manifest itself in comfort or discomfort. For example, the reaction to the temperament, "Performing routine repetitive tasks of short cycle duration", might manifest itself by the individual becoming bored or frustrated. It is important to realize that behaviors and temperaments are closely related. Not having the temperament required to perform the task can result in acting out behaviors which reflect the inability to adapt to a work situation.

In assessing temperaments, the instructor needs to explore with the student his/her self characteristics related to the task as they relate to occupational choices. All questions should be neutral in order not to bias the student's response. Usually, the student will respond directly and immediately to the task where temperaments are involved. Such phrases as, "I can't do this anymore", "This is boring", "Can't I do something else?" are good indicators for exploration. Also, non verbal cues such as throwing down tools, withdrawal, disruptive behavior are indications of a possible relationship to temperaments. Other indications of an inability to adapt to temperaments related to work situations can be psychosomatic in nature. Physical discomfort or complaints related to physical illness are common in the world of work and are often related to difficulty in adjustment.

MODEL PROCESS MAP



SCOPE OF PROJECT



IMPLICATIONS FOR SUBSTANTIAL SEPARATE PROGRAMS

Due to the limited employment opportunities for the population in substantially separate programs, and the unemployment statistics of the unskilled laborer, assessment of vocational strengths and needs is critical. The process of the model outlined above has important implications in determining appropriate training programs.

In many cases, employers are open to modifying jobs; modifying in some form the minimal level of requirements necessary to perform these jobs. This makes modified employment an opportunity for many individuals of this population. One should be aware, however, that there is a high risk of losing such jobs because of shifts in the economy, automation, and new technology. Nevertheless, it is a viable option where no other exists.

To lower this risk, one should choose to remediate skill deficits, wherever possible, as opposed to modification. This assists an individual in meeting the minimum requirements for competitive employment. Most unskilled job positions, representing the lower end of the competitive job market, demand a minimum level of requirements which includes the following characteristics:

Reasoning- Copying/Comparing
Verbal - GED Level 1 (3rd grade)
Numerical- Counting, Adding using whole numbers

Although the individual might not use perceptual skills representing average ability, these skills could not, in most cases, be seriously impaired.

It is obvious that this model does not offer a solution to high risk unemployment represented by jobs requiring low level skills. However, it can be used to measure skill levels and areas in need of remediation on which decisions can be based. By raising skill levels and developing appropriate behaviors, the student in a substantial separate program increases his/her chances of competitive employment and eliminates the risk of short term employment in modified job placement.

In using this model, it is necessary to begin by selecting tasks representative of the characteristics listed above. This is possible because a factor analysis of a given task will result in a measure of complexity due to occupational variables being listed in a hierarchy of skill level. It is important to have a student perform a number of similar tasks in order to determine the ability of the student to laterally transfer basic skills from one task to another. Thus, the conditions in using this approach are as follows:

1. That a given task should be carefully analyzed to insure that the requirements represent the minimum skill levels for competitive employment.
2. That a student performs a variety of tasks to insure the reliability of the assessment.
3. That the task selected represents as many skill categories as possible.
4. That the tasks include an assessment of the ability to laterally apply skills from one task to a similar task.

The Behavior Performance Analysis is useful since demonstration of appropriate behavior, in many cases, is of more importance than inadequate skill levels. The analysis lists twelve behaviors which are found to be demands of almost any task. These behaviors are to be assessed in relation to the specific task being performed using the three categories: Approach to Task, Relationship to Task to Environment, and Production. This analysis may be useful in one of the following:

1. Determining the category of behaviors which have a predominant effect on task performance, thus determining which behaviors need immediate attention.
2. Determining, to some extent, the degree of effect.

3. Determining of whether or not the inappropriate behaviors exhibited have any effect on task performance (production) of the individual or other individuals.
4. Providing base-line data of inappropriate behaviors exhibited.
5. Measuring the individual's appropriate behaviors (area(s) of strength) exhibited during performance on tasks.

The Remediation/Modification Matrix and the Individual Student Cluster Profile are useful only after an observational analysis of a student's performance on several tasks has been recorded. The information gathered may be useful in identifying areas of strength, identifying areas of need, improving skill levels, and expanding the number of occupational choices. It should be understood that the traditional training modes may not always be appropriate in raising skill levels. Successful skill training for this population may very well be an individualized and innovative approach centered totally on the student's strengths and needs.

This model offers a profile of an individual's strengths and needs, skill levels, behaviors, interests and temperaments, which may be useful in determining appropriate skill training, modes, approaches, or programs. In using the least restrictive setting in which to observe performance of a student on a task, it is possible for one of the following decisions to be made:

1. An individual will receive training in a mainstreamed program.
2. An individual will receive training in a mainstreamed program with remediation.

3. An individual will receive training in a mainstreamed program with modification to meet individual needs.
4. An individual will receive training in a substantially separate program including remediation and modification.

One of the primary objectives of this project will be to further test out the implications of the model process with substantially separate populations.

ASSESSMENT

INSTRUMENTATION

TASK ANALYSIS

This instrument contains four columns, each of which is explained below:

CONTENT/STUDENT'S STEPS ON TASK - This column must contain an analysis, a breakdown of sequential steps, of the task to be performed. The best method of analysis, easily read by an impartial observer, is a descriptive statement of each step, containing the actions to be exhibited or performed, and the materials or tools associated with the action of the student.

Example:

Content/Student's Steps on Task	Instructional Strategies
Student: 1. Reads page 2 of textbook 2. Copies columns of numbers off board onto paper 3. Adds the columns of numbers	

INSTRUCTIONAL STRATEGIES - This column should indicate, by descriptions, the methods and strategies the instructor uses to set up and carry out the steps of a task. Make sure, when writing the strategies, that they are written on the line corresponding to the step.

Example:

Student's Steps on Task	Instructional Strategies
Student: 1. Reviews "Drawing in two point perspective"	Instructor: 1. Draws examples of 2 pt. perspective on board or 1. Draws examples on overlay or 1. Students gather around table and look over sample drawings or 1. Reviews "how-to" reading in text

Some Possible Choices For Strategies of that Step

If more than one strategy were used to implement a step, it should look something like this:

Student's Steps on Task	Instructional Strategies
Student: 1. Reviews "Drawing in two point perspective	Instructor: 1. Draws examples of 2 pt. perspective on board. Students gather around table and look over sample drawings
2.	2.
3.	3.

The following examples demonstrate the relationship and the importance of writing precise descriptions of both the Instructional Strategies and the Student's Steps On Task.

Example:

A.

Student's Steps on Task	Instructional Strategies
Student: 1. Reviews	Instructor: 1. Draws

Example A leaves the following questions unanswered:

Student's) What is student reviewing?
Steps on Task) How is student reviewing?

Instructional) What is instructor drawing?
Strategies) Where is instructor drawing?

B.

Student's Steps on Task	Instructional Strategies
Student:	Instructor:
1. Reviews "Drawing in two point perspective"	1. Draws examples using "2 pt. perspective"

Example B answers only the two "what" questions. The other two questions, "how" and "where", have been left answered.

C.

Student's Steps on Task	Instructional Strategies
Student:	Instructor:
1. Reviews "Drawing in two point perspective" by observing teacher's demonstration	1. Draws examples using "2 pt. perspective" on the blackboard

Example C answers all the questions, providing detailed descriptions in both columns.

Note: The more detailed the description, the more information one obtains. For instance, in Example C, one is informed that the student must be looking at the blackboard to obtain the information, and that the student must be sitting in his/her seat.

INSTRUCTOR'S ROLES - This column indicates the role of the instructor during each step of a task, having a direct relationship to the steps of a task and the strategies being used. Role, as defined in this process, is the degree of instructor involvement/action versus student involvement/action, on each step of a task. The following hierarchy of instructor roles, ranging from instructor-active/student-passive, to instructor-passive/student-active, are those found to be common to most instructional situations.

Minimum Student Involvement/Action - - - - - -	Lecturer - - - - - - -	Maximum Instructor Involvement/Action
	Model	
	Participant	
	Guide	
	Helper	
Maximum Student Involvement/Action - - - -	Observer - - - - - - -	Minimum Instructor Involvement/Action

If the task requires the giving of instruction or information using one or more of the first four roles, then the instructor must assume the roles designed in order for the student to complete the task as described.

Choose the appropriate role(s) for each step of a task.

Student's Steps on Task	Instructional Strategies	Instructor's Roles
Student:	Instructor:	
1. Reviews "drawing in two-point perspective" by observing teacher demonstration	1. Draws examples of two-point perspective on blackboard	1. Demonstrator
2. Copies 4 shapes off board	2. Draws 4 shapes on board (drawing circle in two-point perspective	2. Guide
3. Draws other shapes in two-point perspective	3. Circulates throughout class	3. Observer

Note: Whenever possible, the instructor should minimize their role when assessing student performance.

FACTORS INVOLVED - This column should include all factors, occupational variables, related to a student's performance or action on each step of a task. Using the Definitions of Occupational Variables, determine which factors are involved as functions in each step.

Student's Steps On Task	Instructional Strategies	Instructor's Role	Factors Involved
Student:	Instructor:		
1. Reviews drawing in two-point perspective by observing teacher demonstration	1. Draws examples using two-point perspective on blackboard	Demonstrator	G-(Reasoning) Copying/ Comparing V-Listening N-N.A. P/M-Spatial (S) Form (P) P/D-Sitting Seeing (Acuity-Far)

It is important to note that each variable is defined as a statement of function and should correlate with the function defined in the step.

Read instructions on pg. 3 = V/R - Verbal/Reading (The ability to comprehend information at appropriate levels.)

TASK ANALYSIS

☐ Curriculum Area
☐ Prevocational Exploration
☐ Vocational School Exploration
☐ In-School Job Tryout
☐ Community Job Tryout

Instructional Area ______________________________

Unit of Study Related to the World of Work ______________________________

INSTRUCTIONAL MODEL

CONTENT/STUDENT'S STEPS ON TASK	INSTRUCTIONAL STRATEGIES	INSTRUCTOR'S ROLES	FACTOR ANALYSIS

SKILL PERFORMANCE ANALYSIS

This instrument contains the following six columns:

Step of Task - This column represents the number of steps an individual is to perform during the particular task. The numbers in this column should correspond to the numbers located on the task (curriculum) analysis.

Example: If there are 7 steps on the task analysis, number down this column 1-7.

Completed Step of Task - This column indicates whether or not an individual performed and exhibited the behaviors and actions defined in the task analysis. For each step on task , completion of a step should be indicated with a "Yes". Incompletion of a step, not performing or exhibiting the behaviors and actions as stated, should be indicated with a "No".

Had Difficulty With Step of Task - This column is an indicator of an individual's ability to do the task with or without difficulty. If the individual exhibited difficulty with a step, a "Yes" is indicated to the corresponding step. If there was no difficulty, a "No" is indicated to the corresponding step.

Nature of Difficulty - This column is to be used to record the observation of the individual's difficulty. A descriptive statement should be placed on the corresponding line.

Example: "Did not understand directions."

Nature of Modification -

1. This column is to be used to indicate any modification that was attempted (in order to eliminate the individual's difficulty).

2. (Whether by the instructor or the individual.)

A descriptive statement of the modification, (the interaction or intervention), should be noted.

Example: "Repeated instructions", "Moved self closer to board".

Factors Involved - This column is to be used by the observer, whenever a difficulty occurs. The observer should attempt to determine the factors involved in the individual's difficulty, based on the statements found in the following columns: Nature of Difficulty and Nature of Modification. These factors, listed according to step, may be found on the left hand column of task analysis.

***

EXAMPLE OF PROCEDURE

Task Analysis

1. Copy terms from board onto paper.
2. Draw onto paper the shapes on the board.
3. Read directions from book on drawing shapes to perspective.

Step of Task	Completed Step of Task	Had Difficulty With Step of Task	Nature of Difficulty	Nature of Modification	Factors Involved
1.	Yes	Yes	Could not see board	Moved closer to board	Seeing (Acuity-far)
2.	Yes	No	-----	-----	-----
3.	No	Yes	Did not understand directions	Had student read directions again	G. V-R

1. A student can complete the step of a task and still have had difficulty. This indicates that the modification that took place, whether student or instructor initiated, eliminated the difficulty.

2. A student can complete a task without any difficulty.

3. A student who "does not complete task" must have had some difficulty occur. A "Yes" must be placed under the column headed, Had Difficulty With Task. A description of the Nature of Difficulty must be found on the corresponding line, and any modification that took place. In this example, the modification that took place did not eliminate the difficulty, and did not allow the student to complete the task. In this case, listing both the G-reasoning ability, and the V-(verbal ability)-Reading is appropriate.

If, for example, Step 3 looked like this:

Yes	Yes	Did not understand directions	a. Had student read directions again b. Read orally to student	V-R

One could safely assume it is the student's reading ability (V-R), and not their level of comprehension (G.).

Also, it is possible for the factors involved in a student's difficulty to complete a task to be of a behavioral nature.

Example:	Nature of Difficulty	Modification	Factors
	Did not understand directions (Not paying attention Talking to peer)	Repeated directions	Attending to Task

SKILL PERFORMANCE ANALYSIS

STEP OF TASK	COMPLETED STEP OF TASK YES OR NO	HAD DIFFICULTY WITH STEP OF TASK YES OR NO	NATURE OF DIFFICULTY	NATURE OF MODIFICATION	FACTORS INVOLVED
	30				31

BEHAVIORAL PERFORMANCE ANALYSIS

This instrument has been divided into the following four columns:

General Work Readiness Behaviors - This column contains a list of 12 behaviors that are representative of the behaviors an individual exhibits during any task, activity, job, etc. Being factors specific to a task or activity, an individual's behavioral performance while on the task or activity may directly effect their performance on the task, another's performance, or their production. Any one of these behaviors may be found to occur several times throughout a task or activity. For example, "Attends to Task" is observable in almost every individual step of a task or activity.

Exhibits Appropriate Behaviors - This column reflects an individual's ability to exhibit appropriate behaviors during, or while, performing on a task or activity. It is to be completed by the observer with a "Yes" or "No" response as determined by the recorded observations. For each of the General Work Readiness Behaviors that were exhibited appropriately throughout the task of activity, a "Yes" response should be indicated. In any case, where an individual did not exhibit the appropriate behaviors listed, resulting in inappropriate behavior, a "No" response should be indicated.

Description of Behaviors - This column allows space for the written observations of behavior, both positive and negative, that were recorded during the task or activity. These recorded written observations of behavior should be transferred to this column precisely as they were observed. In no instance should there be a "No" response in the preceeding column without a description of the behavior in this column.

Number of Times Behaviors Exhibited - This column is the quantifier for the description of behaviors exhibited. Prior to filling in this column, the information recorded during the observation, type and number of behaviors exhibited, should be tallied. Once the count of each behavior is tallied, it should be placed on the line corresponding to the behavior.

PROCEDURE

1. Observation - This is the key to accurate and precise information being transferred onto the Performance Analysis. It should occur during the task or activity in which the student is participating/performing. It is recommended that the observer record the behaviors exhibited on a separate piece of paper, in either of the following ways:

1a. Record each behavior as it is exhibited by the student.

Example: Slammed desk top
Verbally interrupted peer
Slammed desk top
Verbally interrupted peer
Verbally interrupted peer
Slammed desk top
Swore

1b. Also, if possible, record any predominant or reoccuring antecedents and consequences.

Example: Antecedent - Finished work, waiting
Behavior - Verbally interrupted peer
Consequence- Gave activity to do

2a. Record each new behavior exhibited, but if repetitions, make a mark next to the description of the behavior, indicating reoccurance.

Example: Slammed desk top ✓✓
Verbally interrupted peer ✓✓
Swore

(The description itself indicates one behavior.)

2b. Also, if possible, record any predominant or reoccuring antecedents and consequences.

Example: Slammed desk top ✓✓
Waiting ✓✓ Verbally Interrupted ✓✓✓ Activity ✓✓
Swore

In the example above, the student was waiting two out of the three times when he/she verbally interrupted peer. In two out of the three incidents, when the student was given an activity to do, the behavior extinguished.

This indicates that the student not only exhibits inappropriate behavior, when interacting with peers, but also that the student cannot wait in an appropriate manner. Thus, two behaviors are noted from one behavioral incident.

Correlation Between General Work Readiness Behaviors and Behaviors Observed-

To determine this correlation, review the task and note those appropriate behaviors that should have been exhibited while performing on task. (This could be done prior to task being performed.) Those that do not apply may be indicated with a N.A. or left blank.

> Example: If being assessed in a situation without peers, one could not measure appropriate interacting with co-workers.
> Interactions with co-workers N.A.

1. Read through the definition sheet and the list of behaviors recorded during observation, until locating those that correlate.

2. In most cases, unless both positive and negative behaviors are recorded, one will be looking for the opposite.

Behaviors Observed	General Work Readiness Behaviors
	Attends to task
"Did not follow directions"	"Follows directions"

Behaviors Observed	General Work Readiness Behaviors
	Responsibility
Slammed desk top	Manages self- Lacks disruptive behavior
	Interaction with Co-workers
Verbally interrupts	Allows co-workers a chance to complete their assigned task without interruption, criticism, instruction
	Productive Use of Free Time
Unable to wait	Waits patiently

3. In the column headed Exhibited Appropriate Behaviors, a "No" response would be noted next to the behavior in which the student exhibited negative (opposite) behaviors.

Responsibility	"No"
Interactions with Co-Workers	"No"
Productive Use of Free Time	"No"

4. In the column headed Description of Behaviors write the recorded observation, the description of behaviors exhibited, verifying the reason for a "No" response in the preceeding column.

For your own information, one may want to note positive behaviors unusual to a student's repertoire.

Example: Initiation "Yes" Began reading immediately

5. Review recorded observations and tally the number of negative behaviors that occurred, (as negative is of major concern). If B method was used, just transfer into this column.

Responsibility	"No"	Slammed desk top	3
Interactions with co-workers	"No"	Verbally interrupted peers	3
Productive use of free time	"No"	Could not wait patiently	2

BEHAVIORAL PERFORMANCE ANALYSIS

GENERAL WORK READINESS BEHAVIORS		EXHIBITS APPROPRIATE BEHAVIORS YES OR NO	DESCRIPTION OF BEHAVIORS	NUMBER OF TIMES BEHAVIORS EXHIBITED
APPROACH TO TASK	Attendence			
	Punctuality			
	Initiation			
	Attends to Task			
RELATIONSHIP TO TASK ENVIRONMENT	Interactions with Co-Workers			
	Responsibility			
	Frustration Tolerance			
PRODUCTION	Supervision			
	Seeks Assistance			
	Productive Use of Free Time			
	Productive Use of Work Time			
	Production -Rate			
	-Quality			

Interests Checklist

There are ten interests which are defined as operational statements and are included at the end of this packet. Each step of the task has been analyzed to determine which interest factors are involved. Each interest is rated against five variables from "like very much" to "dislike very much".

1. Rate only those interests which are directly related to the task beginning with step one.
2. Record the student's rating only where the student has responded with a definite verbal statement of interest using the five variables.
3. Do not record any self rating of student interest unless interaction occurs between you, as the recorder, and the student.
4. Base your recording of the interest of the student on the observable behavior and attitude of the student.
5. Where your assessment and the student's response are not the same, attempt to resolve the difference by further interaction with the student.

Temperament Checklist

There are ten temperaments which are defined as operational statements and are included at the end of this packet. A temperament measures the ability to adapt to "specific types of job-worker situations". Each step of the task has been analyzed to determine which temperament factor is involved. Each temperament is rated against "able to adjust", "no great feeling", and "not able to adjust".

1. Rate only those temperaments which are directly related to the task beginning with step one.

2. Record the student's rating only where the student has responded with a definite verbal statement using the three variables.
3. Do not record any self rating of the student unless interaction occurs between you as the recorder and the student.
4. Base your recording of the student's ability to adapt on the observable behavior of the student.
5. Where your assessment and the student's response is not the same, attempt to resolve the difference by further interaction with the student.

DEFINITION

OF

VARIABLES

INTEREST PREFERENCE CHECKLIST

Likes Very Much		Likes		Indifferent		Dislikes		Dislikes Very Much	
Student	Teacher	Student	Teacher	Student	Teacher	Student	Teacher	Student	Teacher

TEMPERAMENT ADAPTIBILITY CHECKLIST

	Could Adjust		May or May Not Be Able to Adjust		Could Not Adjust	
	Student	Teacher	Student	Teacher	Student	Teacher

DEFINITION OF VARIABLES

Skills : This section lists all of the variables used in the process of the Vocational Assessment for Special Needs Project. Each variable is defined as an operation. Also, each skill variable is arranged in a hierarchy of simple to complex.

In the case of the variables listed under verbal, a developmental chart is included which compares levels of "General Educational Development" to approximate grade levels at which verbal skills are usually acquired. Under numerical, a numeration chart is included to show the hierarchy that exists within a numerical operation. For example, adding begins with whole numbers and ends with ratios in any of the four functional application areas.

Behaviors: The variables relating to behavioral factors are divided into three categories; approach to the task, relationship to the task environment, and production. There is a total of twelve general work readiness behaviors, each of which is divided into several specific operational statements.

Interests: In addition, there are ten interest factors relating to preference for particular kinds of work activities. These interest factors are found in The Handbook for Analyzing Jobs (U.S. Dept. of Labor) and are the basis for many well known interest surveys.

Temperaments: Also, there are ten temperament factors relating to adaptability to work situations. Each factor is a statement of the individual's ability to adjust to the nature of the work involved. A further description of temperaments, as they apply to various occupational settings, can be found in The Handbook for Analyzing Jobs.

OCCUPATIONAL CHARACTERISTICS

CODING SHEET

G	Cognitive Skills - Reasoning
V-S	Cognitive Skills - Verbal/Speaking
V-R	Cognitive Skills - Verbal/Reading
V-W	Cognitive Skills - Verbal/Writing
N	Numerical
S	Spatial Perception
P	Form Perception
Q	Clerical Perception
K	Motor Coordination
F	Finger Dexterity
M	Manual Dexterity
E	Eye/Hand (Foot) Coordination
C	Color Discrimination
P.D.	Physical Demands

INTERESTS

I-1	Activities working with things and objects
I-2	Activities involving business contact with people
I-3	Activities of a routine, concrete, organized nature
I-4	Activities helping, instructing, or working directly with people
I-5	Activities resulting in prestige or esteem of others
I-6	Activities concerned with communication of information
I-7	Activities of a scientific or technical nature
I-8	Activities of an abstract or creative nature
I-9	Activities using methods, machines or processes
I-10	Activities resulting in tangible, productive satisfaction

TEMPERAMENTS

T-1	Performing work which requires frequent change
T-2	Performing repetitive tasks
T-3	Planning and directing an entire activity

TEMPERAMENTS (Cont'd)

T-4	Dealing with people
T-5	Influencing people's opinions, attitudes and judgements
T-6	Working under pressure
T-7	Making decisions using personal judgement
T-8	Making decisions based on measurable or verifiable criteria
T-9	Interpreting and expressing feelings, ideas or facts in terms of personal viewpoint
T-10	Working within precise limits or standards of accuracy

BEHAVIORS

APPROACH TO TASK

ATT	Attendance to Task
PUNC	Punctuality
INIT	Initiation
A to T	Attends to Task

RELATIONSHIP TO TASK ENVIRONMENT

INT W CO	Interaction with Co-Workers
RESP	Responsibility
FR/TOL	Frustration/Tolerance

PRODUCTION

SUPER	Supervision
S ASST	Seeks Assistance
P.F.T.	Productive Use of Free Time
P.W.T.	Productive Use of Work Time
P.R.	Production Rate
QUAL	Quality

COGNITIVE SKILLS *

(G) Reasoning

SYNTHESIZING	The ability to:	design, originate, create, compose, integrate, interpret, formulate, conceive, appraise, assess	systems, analyses, hypothesis, applications, data
COORDINATION	The ability to:	implement, plan, organize, direct, arrange	activities, plans, policies, processes
ANALYZING	The ability to:	evaluate, review, investigate, deduce, classify	observations, information, material, statistical data
APPLICATION	The ability to:	gather, classify, summarize, calculate	information, reports, objects, mathematical operations
COMPREHENSION	The ability to:	generalize, relate, categorize, organize, transfer, interpret, estimate, verbalize	information, operations, transactions, materials
COPYING/COMPARING	The ability to:	translate, define, distinguish, acquire, recall, recognize, inspect, sort, verify, record	symbols, objects according to size, shape and color, one, two step, oral/written directions, information, quantities, lengths, written data

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* Derived from: Bloom, B.S. et. al. *A Taxonomy of Educational Objectives: Cognitive Domain*, (New York: David McKay, 1956)

Handbook for Analyzing Jobs, (U.S. Dept. of Labor, 1972) pp. 73-75

COGNITIVE SKILLS

(V) VERBAL

(V/S)
SPEAKING (auditory expression):

The ability to:	use	organs of mouth
	recall	sounds and syllables
	formulate	words from sounds and syllables
	comprehend	meaning of words
	combine	words into sentences
	formulate	sentences of appropriate syntax
	comprehend	meaning of sentences
	communicate	at appropriate level
	comprehend	appropriate level of words and syntax

(V/R)
READING (visual reception):

The ability to:	use	eyes
	sound out	syllables
	formulate	syllables into words
	recall	definition of words
	comprehend	a sequence of words (interpretation of symbols)
	comprehend	several sequences of words (paragraphs, short stories, etc.)
	communicate	(visually receive) information at appropriate level
	comprehend	the information of appropriate levels

(V/W)
WRITING (visual expression):

The ability to:	coordinate	movements of cognitive stimuli (thoughts) and use of fingers (finger dexterity)
	recall	words
	recall	sounds of words
	spell	words by sound
	(recall)	letter sounds and matching to word sounds
	comprehend	definitions of words
	communicate	using appropriate grammar,syntax, and printing/cursive
	formulate	words into sentences
	formulate	words into paragraphs
	communicate	ideas of appropriate level (grammar, syntax, etc.)
	formulate	ideas at an appropriate level

(V/L)
LISTENING (auditory reception):

The ability to:	hear	sounds
	process	sounds
	formulate	sounds into words
	recall	meaning of sounds heard (words)
	comprehend	syntactical meaning of simple sentences
	comprehend	meaning of sentences at appropriate level
	receive	synatactical and lexical sounds of appropriate levels

Listening, comprehension of spoken language, is measurable only if the spoken words processed auditorily require subsequent observable behavior (action) on the part of the listener. Examples: "Stand up" (physical response); "Name the letters of the alphabet" (verbal response); or "Record the answers to the following questions" (written response). Listening cannot be observed as an ongoing process, yet, the product (as a result of the process) is a measure of an individuals ability to listen.

Assumptions

1. The majority of these lessons require an individual student to comprehend from listening (from a minimal amount of directions to a lecture on a topic)
2. The majority of these lessons require subsequent action on the part of these individual students (either immediately or in the near future) as the purpose of listening
3. The majority of the instructors use the appropriate levels of lexical vocabulary and syntax when speaking to their students

Comment: (assumption #3)
The listener's background, level of understanding, is important to understanding language in listening (comprehension)

Observable Behavior is that which is directly related to listening: the product of the process, not the behavior exhibited during the process of listening.

LEVEL (Grades)	OCCUPATIONAL REQUIREMENTS (G.E.D.)	SPEAKING	READING	WRITING
K-3	Reaches Level 1	Speaks in simple sentences Uses various parts of speech Syntax complete Grammar mastered Vocabulary at appropriate level Average sentence length 7.5 words	Recognizes words appropriate to level Developing word recognition Beginning use of dictionary	Writes letters of alphabet, name, numbers 1-10 Prints simple sentences grammatically correct) Rudiments of punctuation Mastery of printing, letter formation, slanting, spacing, legibility
4-8	Reaches Level 2	Speaks with pauses, emphasis Uses past/present/future Variation of word order Vocabulary at appropriate level	Recognizes words appropriate to level Use of dictionary Comprehends reading of appropriate levels Short stories Books of appropriate readability level Texts of appropriate readability level	Mastery of cursive (mechanics) Spelling at appropriate level Proof reading Capitalization Formats various types of written products (poetry/prose) Rudiments of composition skills
9-10	Reaches Level 3	Purpose) Content) Appropriate Organization) Level Word choice) Oral presentations Speeches	Recognizes words appropriate to level Comprehends reading of appropriate levels Encyclopedias Novels, magazines Shop manuals	Refines composition skills (appropriate level) Written reports Essays
11-12	Reaches Level 4	Purpose) Content) Appropriate Organization) Level Word choice) Panel discussions Presentations	Recognizes words appropriate to level Newspapers Journals Manuals Thesauraus Comprehends reading appropriate to level	Writes according to variety of prescribed formats

Source: Handbook for Analyzing Jobs (U.S. Government, 1972)
Lamb, P., Guiding Children's Language Learning (William C. Brown, 1971)

COGNITIVE SKILLS

(N) . Numerical

COUNTING:	The ability to:	recall	symbols and names assigned to numbers
		recall	the value of, set of objects assigned to each number
		recall	arrangement, sequence, pattern of numbers
COMPARING:	The ability to:	recall	values of, set of objects assigned to numbers
		express	simple inequalities
		express	simple equalities
ADDING:	The ability to:	recall	values, set of objects assigned to numbers
		recall	basic facts - "grouping together"of addends (+) order does not change sum
		group	numbers (addends) together to form a sum
		make	simple statements of equality
		solve	simple equations
		form/arrange	addition equations
		recall	facts of carrying-place values
		solve	complex equations (equations involving more than 2 numbers and operations)
SUBSTRACTING:	The ability to:	recall	values, set of objects assigned to numbers
		recall	basic fact-taking away, opposite of addition
		group	numbers to form a minuend
		make	simple statements of equality
		solve	simple equations

SUBSTRACTING: (cont'd)

The ability to:	form/arrange	substraction equations
	recall	facts of borrowing-place values
	solve	complex equations (equations involving more than 2 numbers and operations)

MULTIPLYING:

The ability to:	recall	values of set of objects assigned to numbers
	recall	facts - Symbol(x), process of adding a given number or quantity a certain number of times in a faster manner, order of factors does not change product
	recall	multiplication facts/table
	make	simple statements of equality
	solve	simple equations
	recall	place value when carrying, recall the facts of products of 0 & 1
	solve	complex equations

DIVIDING:

The ability to:	recall	values of set of objects assigned to numbers
	recall	facts - Symbol ( ), process of finding out how many times a given number/quantity is contained in another-opposite of multiplication
	make	simple statements of equality
	solve	simple equations
	solve	equations involving remainder
	recall	place value
	solve	complex equations

ALGEBRA:

The ability to:	recall	equalities of equations
	recall	operations
	understand	when to use operations
	recall	facts/content about sets, subsets, variables
	recall	equations containing variables
	recall	properties of operations
	understand	how to solve equations involving variables
	solve	simple equations involving variables
	solve	complex equations involving more than 2 variables

GEOMETRY:

The ability to:	recall	necessary terms-content (point, line, segment, rays, angles)
	recognize	differences among terms/content(perpendicular,parallel
	recall	Necessary formula (perimeter, area, volume)
	understand	use of formula
	apply	formulas to equations
	solve	simple geometric problems (measure degrees of angles)

NUMERATION

a. whole numbers
b. simple fractions
c. complex fractions
d. mixed numerals
e. units of measure
f. decimals (10th, 100ths, 1,000ths)
g. proper & improper fractions
h. positive & negative integers
i. exponents
j. percents
k. proportions
l. ratios

The above is an underlying hierarcy which applies to the operations. For example, one learns to count, compare, add, etc., with whole numbers first, later learning to count, compare, add, etc., with simple fractions, complex fractions, etc.

FUNCTIONAL APPLICATION

money

time

measurement

word problems

The above four functional skills are the application of the operations and numeration in everyday use.

PERCEPTUAL MOTOR SKILLS

(S)	1.	Spatial Perception	The ability to:	look at	drawings or diagrams
				form	mental images in 3 dimension
				perceive	height, width, length, etc. of objects from drawings or diagrams
(P)	2.	Form perception	The ability to:	look at	drawings or objects
				observe	detail in objects or drawings
				notice	differences in shapes or shadings
(Q)	3.	Clerical Perception	The ability to:	observe	details in written materials, charts, and tables
				recognize	errors in spelling, numbers, punctuation
				copy	written materials without making errors
(K)	4.	Motor Coordination	The ability to:	move	eyes, hands and/or fingers together
				perform	a task rapidly and correctly using eyes, hands, and/or fingers
(F)	5.	Finger Dexterity	The ability to:	use	fingers to perform tasks
				perform	tasks involving small objects
				perform	tasks rapidly and correctly
(M)	6.	Manual Dexterity:	The ability to:	move	hands with ease and skill
				turn	hands when placing objects
(E)	7.	Eye-Hand-Foot Coordination:	The ability to:	use	eyes, hands, and feet
				move	hands and feet in response to visual signals or observations
(C)	8.	Color Discrimination:	The ability to:	use	eyes
				see	colors
				identify	liknesses and differences in colors, shades, hues

(P.D.) PHYSICAL DEMANDS *

1. Strength			
a. Standing	The ability:	to remain	upright on one's feet
Walking		to move about	at a work station-on one's feet
Sitting		to remain	seated in a normal position
b. Lift, Carry,		to raise or lower	object from one level to another level
Push, Pull		to move	an object using hands, arms, or shoulders
(Light lift 20#, Carry 10#		to exert	force on an object (slapping, striking, kicking, treadling action)
Medium lift 50#, Carry 25# Heavy lift 100#, Carry 50# Very Heavy lift excess of 100# carry 50# or more)		to exert	force on an object to move toward force
2. Climbing and/or Balancing			
a. Climbing	The ability:	to ascend or descend	(includes ladder, stairs, pole, scaffolding, ramp)
b. Balancing		to maintain	body equilibrium when walking, standing, crouching, or running on narrow, slippery and/or erratically moving surface
3. Stooping, Kneeling, Crouching, and/or Crawling			
a. Stooping	The ability:	to bend	body forward and downward by bending spine at the waist
b. Kneeling		to bend	legs at knees to come to rest on knees

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* Derived from: Handbook for Analyzing Jobs, (U.S. Dept. of Labor, 1972) pp. 325-338.

c. Crouching	The ability:	to bend	body downward and forward by bending legs and spine
d. Crawling		to move	about on hands and knees or hands and feet
4. Reaching, Handling, Fingering and/or Feeling			
a. Reaching	The ability:	to extend	hand(s) and arm(s) in any direction
b. Handling		to sieze, hold, grasp, turn	with hand(s) (Fingers not involved)
c. Fingering		to pick, pinch	with fingers primarily
d. Feeling		to perceive	attributes of objects with tactile senses
5. Talking and/or Hearing			
a. Talking	The ability:	to express, exchange	ideas by spoken word
b. Hearing		to perceive	nature of sounds by ear
6. Seeing			
a. Acuity, far	The ability:	to see	clearly at 20 feet
b. Acuity, near		to see	clearly up to 20 inches
c. Depth Perception		to judge	distance and space relationships (three dimensional)
d. Field of Vision		to see	up, down, right, left, while eye is fixed on a given point
e. Accomodation		to adjust	lens of eye to bring an object into sharp focus
f. Color		to identify, distinguish colors	

INTERESTS *

1. Activities dealing with things and objects. Primary activity involves working with or on physical objects using instruments or tools.

2. Activities involving business contact with people. Primary activity involves working to set up business contact with people to sell, buy, promote and bargain.

3. Activities of a routine, concrete, organized nature. Primary activity involves short cycle, repetitive work which is organized and planned by someone else.

4. Activities helping, instructing, or working directly with people. Primary activity involves assisting people to meet needs, solve problems, learn new information or skills.

5. Activities resulting in prestige or esteem of others. Primary activity involves directing or managing other peoples' activities or entertaining other people (acting, sports, arts or music, literature).

6. Activities concerned with communication of information. Primary activity involves giving information through writing, demonstration, teaching, visual arts, recording, classifying, interpreting.

7. Activities of a scientific and technical nature. Primary activity involves researching, analyzing, determining and recording scientific or technical information using scientific or technical methods, instruments, or equipment.

8. Activities of an abstract or creative nature. Primary activity involves using skills to solve problems, develop new knowledge and methods, create new ways to express ideas or feelings.

9. Activities using methods, machines, or processes. Primary activity involves using methods, machines or processes to perform work on data and things.

10. Activities resulting in tangible, productive satisfaction. Primary activity involves using physical skills to produce something either resulting in creating, changing, or repairing something.

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* Derived from: Handbook for Analyzing Jobs, (U.S. Dept. of Labor, 1972) pp. 317-321.

TEMPERAMENTS *

1. Performing work which requires frequent change. Involves moving from one task to another task requiring different skills using different materials or methods. (Does not refer to changing between similar tasks.)

2. Perform repetitive tasks. Involves performing tasks which have a set sequence or procedure required every time the task is performed. (Does not refer to the individual arranging a set of tasks in a familiar routine.)

3. Planning and directing an entire activity. Involves being responsible for negotiating, organizing, directing, supervising, formulating, practicing or making final decisions. (Does not refer to planning for one's own activities.)

4. Dealing with people. Involves supervising, counseling, teaching; gives information to, obtains information from, manages for people. (Does not refer to giving or receiving simple instructions.)

5. Influencing people's opinions, attitudes and judgement. Involves motivating, convincing or negotiating with other people as a job duty. (Does not refer to situations in which the individual is required to choose from several alternatives.)

6. Working under pressure. Involving performance under emergency, critical, unusual or dangerous conditions.

7. Making decisions using personal judgement. Making judgements or decisions based on the five physical senses or knowledge based on experience. (Does not refer to using memorized data.

8. Making decisions based on measurable or verifiable criteria. Making judgements or decisions using data to measure or verify as opposed to using physical senses or knowledge gained from experience. (Does not refer to using memorized data.)

9. Interpreting and expressing feelings, ideas, or facts in terms of personal viewpoint. Involves reflecting original ideas, using imagination, interpreting, criticizing, etc. (Does not refer to interpreting instructions or other people's viewpoint, performing art work by copying someone else's plan or design.)

10. Working within precise limits or standards of accuracy. Involves being precise, thorough, exacting or meticulous in regard to material worked. (Does not refer to activities in which approximate measures are used as opposed to precise measurement.)

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* ibid., pp. 295-313.

GENERAL WORK READINESS BEHAVIORS

APPROACH TO TASK

ATTENDANCE: Comes to work without absence.
Arrives to designated places, meetings, assignments, etc. without absence.

PUNCTUALITY: Comes to work on time.
Arrives to designated places, meetings, assignments, etc. on time.

INITIATION: Initiates work on task when directions are known beforehand.
Initiates work on task as soon as directions/instructions are given.

ATTENDS TO TASK: Listens to directions/instructions.
Follows directions/instructions.
Continues on task, without being prompted, until complete.
Able to focus on task with little distractability (self-interruptions).

RELATIONSHIP TO TASK ENVIRONMENT

INTERACTIONS WITH CO-WORKERS: Allows co-workers a chance to complete their assignment without interruption, instruction, criticism, etc.
Gives assistance only if asked.
Offers some assistance if co-worker has expressed or exhibited difficulty.
Gives only the assistance necessary to clear co-worker's problem/confusion.
Verbalizes, communicates relating to task.
Listens to co-workers.
Asks for something in an appropriate manner.
Responds in a polite, appropriate manner.
Responds by giving, if possible, what co-worker has requested.

RESPONSIBILITY:	Manages behavior, handling oneself in an appropriate manner, (lack of disruptive behaviors). Follows rules of work area, classroom, building, etc. Observes safety rules/procedures. Carries out, performs assigned tasks. Performs assigned tasks on time. Remembers to bring assignments. Handles/cares appropriately for materials, tools, etc.
FRUSTRATION TOLERANCE:	Continues to work on task in face of obstacles or set-backs. Makes an attempt or several attempts to solve problem, before seeking assistance.

PRODUCTION

SUPERVISION:	Need of: Works without constant supervision. Works at a constant and consistent rate without assistance or prompting. Reaction to: Responds appropriately to supervision - accepting assistance, direction, criticism, etc. if justified.
SEEKS ASSISTANCE:	Seeks assistance only when necessary (after making all possible attempts to resolve the problem on one's own),
PRODUCTIVE USE OF FREE TIME:	Waits patiently in between tasks. Seeks out appropriate activities/tasks to do during free time. When possible, selects something constructive to do (i.e. future tasks, past incomplete). Conducts self in an appropriate manner - not interrupting others still working.
PRODUCTIVE USE OF WORK TIME:	Uses the work time to perform necessary assigned tasks. Eliminates unnecessary work tasks.
PRODUCTION RATE:	Produces to best of ability. Produces within time period. Produces equal amounts for each period within ________%.
QUALITY:	Quality of work is to best of ability. Produces within set limits. Produces _____% correctly.

EVALUATION

OF

INSTRUMENTATION

FACTOR ANALYSIS

The four factors analyzed are as follows:

Skill Factor Analysis
Behavior Factor Analysis
Interest Factor Analysis
Temperament Factor Analysis

Each instrument is a recording device which, when completed, will indicate, quantitatively, the areas of difficulty. Also, the instrument will represent a bar graph for each factor.

In both the SKILL FACTOR ANALYSIS and BEHAVIOR FACTOR ANALYSIS, the measurement must represent the total number of incidences of difficulty and the number of inappropriate behaviors observed over several tasks. In other words, the total number of checkmarks has no relationship to the number of tasks. The number of difficulties may have been observed more than once in a given task, or no difficulties may have occurred.

Number of Difficulties) $>$ (Number of
) or (Tasks
Number of Appropriate) $<$ (
Behaviors) (Observed

On the SKILL PERFORMANCE ANALYSIS for each given task, each incident of difficulty will be listed by a "Yes" response next to the step where the difficulty occurred. Also, the factor involved will be recorded on the same line as the step. That factor code will be the same code used on the SKILL FACTOR ANALYSIS sheet. Record every incident of difficulty from the SKILL PERFORMANCE ANALYSIS by making an "X" next to the corresponding skill factor code.

Example: SKILL PERFORMANCE ANALYSIS

Had Difficulty With Step of Task)	(Factors Involved
No)	(G
Yes)	(V-R
Yes)	(V-W

SKILL FACTOR ANALYSIS

Skill Factors	Number of Difficulties											
G												
V-S												
V-R	X											
V-W	X											
N												
S												

Continue recording difficulties using the above method for each SKILL PERFORMANCE ANALYSIS for each task observed.

Using the same process, record each occurrence of inappropriate behavior on the BEHAVIOR FACTOR ANALYSIS. Take the BEHAVIOR PERFORMANCE ANALYSIS and note under the column, "Exhibits Appropriate Behaviors", the responses marked "No". The number of times inappropriate behavior occurred will be listed under "Number of Times Behavior Exhibited". Mark accordingly under "Number of Behaviors Observed".

BEHAVIOR PERFORMANCE ANALYSIS

General Work Readiness Behaviors	Exhibits Appropriate Behaviors	Yes or No		Number of Times Behavior Exhibited			
Relationship To Task Environment	Interaction with Co-Workers	No		3			
	Responsibility	Yes					
	Frustration Tolerance	Yes					

BEHAVIOR FACTOR ANALYSIS

Behavioral Factors		Number of Behaviors Observed								
Relationship To Task Environment	Interaction with Co-Workers	X	X	X						
	Responsibility									
	Frustration Tolerance									

Continue recording difficulties using the above method for each BEHAVIOR PERFORMANCE ANALYSIS for each task observed.

When the SKILL AND BEHAVIOR FACTOR ANALYSIS are completed, both will represent a bar graph.

In the case of the INTEREST FACTOR ANALYSIS, only the predominant step or activity will be rated on the INTEREST PREFERENCE CHECKLIST.

In the case of the TEMPERAMENT FACTOR ANALYSIS, only the predominant temperaments related to the task will be recorded. In both cases, the student's response should be weighted more heavily than the rating under "teacher".

Example:

INTEREST PREFERENCE CHECKLIST

	Likes Very Much Student/Teacher			Likes Student/Teacher	
9. Activities using methods, machines, processes	✓	✓			
10. Activities resulting in tangible, productive satisfaction	✓				✓

TEMPERAMENT ADAPTABILITY CHECKLIST

	Could Adjust			May or May Not Be Able to Adjust	
	Student/Teacher			Student/Teacher	
1. Performing work which requires frequent change				✓	✓
3. Performing repetitive tasks	✓			✓	

INTEREST FACTOR ANALYSIS

Interests	Curriculum Areas		
	Industrial Arts		
9. Activities using methods, machines, or processes	X		
10. Activities resulting in tangible, productive satisfaction	X		

TEMPERAMENT FACTOR ANALYSIS

	Curriculum Areas		
	Industrial Arts		
1. Performing work which requires frequent change			
2. Activities involving business contact with people			
3. Activities of a routine, concrete, organized nature	X		

In the case of the above example, only "likes very much" and "likes" are recorded for interest factors, and only "could adjust" is recorded for temperament factors. Upon completion of the INTEREST FACTOR ANALYSIS, a profile will result showing students' preference for particular activities and particular work areas. In the TEMPERAMENT FACTOR ANALYSIS, a profile will result showing students' ability to adjust to particular temperaments in given work situations.

It is important to remember that all of the factor analysis must be seen as an ongoing assessment process.

SKILL FACTOR ANALYSIS

No. of Tasks Observed ________
No. of Curriculum Areas Represented ________
No. of Difficulties Observed ________

SKILL FACTORS	NUMBER OF DIFFICULTIES																					
G																						
V-S																						
V-R																						
V-W																						
N																						
S																						
P																						
Q																						
K																						
F																						
M																						
E																						
P.D.																						

BEHAVIORAL FACTOR ANALYSIS

No. of Tasks Observed ________
No. of Curriculum Areas Represented ________
No. of Behaviors Observed ________

	BEHAVIORAL FACTORS	NUMBER OF BEHAVIORS OBSERVED																			
APPROACH TO TASK	Attendance																				
	Punctuality																				
	Initiation																				
	Attends to Task																				
RELATIONSHIP TO TASK ENVIRONMENT	Interaction with Co-workers																				
	Responsibility																				
	Frustration Tolerance																				
PRODUCTION	Supervision																				
	Seeks Assistance																				
	Productive Use of Free Time																				
	Productive Use of Work Time																				
	Production - Rate																				
	- Quality																				

INTEREST FACTOR ANALYSIS

INTERESTS	CURRICULUM AREAS						
1. Activities dealing with things and objects							
2. Activities involving business contact with people							
3. Activities of a routine, concrete, organized nature							
4. Activities helping, instructing, or working directly with people							
5. Activities resulting in prestige or esteem of others							
6. Activities concerned with communication of information							
7. Activities of a scientific or technical nature							
8. Activities of an abstract or creative nature							
9. Activities using methods, machines or processes							
10. Activities resulting in tangible, productive satisfaction							

Coding: + = likes o = indifferent - = dislikes

TEMPERAMENT FACTOR ANALYSIS

TEMPERAMENTS	CURRICULUM AREAS						
1. Performing work which requires frequent change							
2. Performing repetitive tasks							
3. Planning and directing an entire activity							
4. Dealing with people							
5. Influencing people's opinions, attitudes and judgements							
6. Working under pressure							
7. Making decisions using personal judgement							
8. Making decisions based on measureable or verifiable criteria							
9. Interpreting and expressing feelings, ideas, or facts in terms of personal viewpoint							
10. Working within precise limits or standards of accuracy							

Coding: + = could adjust o = may or may not - = could not adjust

REMEDIATION/MODIFICATION MATRIX

INDIVIDUAL STUDENT CLUSTER PROFILE

The purpose of these two instruments is not to achieve a correlation to a specific job position. The objective is to monitor a process which will result in a maximum number of occupational choices and a maximum number of life style choices for the student.

Using the Remediation/Modification Matrix, identify those areas needing attention in order to improve skill levels remembering that remediation is always a preferable alternative to modification, whenever possible. For each condition identified, determine which action is necessary. There are five alternative actions depending upon the amount of information available.

1. Remediation available on basis of information already known.
2. Modification on the basis of information already known.
3. Necessity for referral to an appropriate specialist for additional information required for decision making.
4. Remediational strategies recommended by the specialist.
5. Modification strategies recommended by the specialist.

Once the Remediation/Modification Matrix is completed, it will be possible to develop a strength, deficit profile of the student, using the Individual Student Cluster Profile.

Using the correlation chart, develop the Individual Student Cluster Profile for each factor by indicating that "No Special Services Required", "Remediation Required", or "Modification Required". The result will be a profile of strengths and weaknesses relating to occupational variables.

Example:

Remediation/Modification Matrix

	Action Present	
Condition	Remediation	Modification
Speaking		
Reading	✓	
Writing	✓	
Math	✓	
Perceptual/ Motor		
Physical Demands (hearing)		✓

INDIVIDUAL STUDENT CLUSTER PROFILE

	No Special Services Required	Remediation Required	Modification Required
Cognitive Skills			
G			
V-S	✓		
V-R		✓	
V-W		✓	
N		✓	
P/M			
S	✓		
P	✓		
Physical Demands			
Talking/ Hearing			✓

Using the Individual Student Cluster Profile, it will become possible to match the information to the requirements for each occupational cluster. This information can be obtained from either commercial sources or from the Department of Labor documents, based on the job analysis of occupations in each of the Work Arrangement Groups (see Direct Relationship of Tasks to Occupational Clusters).

Example:

	ISCP		Work Arrangement Group 05.05 Sub-Group 05.05.09 (Mechanical Work)
G-		G-	(average ability level required for all factors)
N-	Remediation	N-	
S-	No services required	S-	
F-	No services required	F-	
K-	No services required	K-	
M-	No services required	M-	

Physical Demands:

Strength	No services needed	Light/medium work
Climbing/Balancing	No services needed	
Whole Body Range of Motion	No services needed	3. Stooping, Kneeling, Crouching, and/or Crawling
Upper Extremities	No services needed	4. Reaching, Handling, Fingering, and/or Feeling
Talking/Hearing	Modification required	(Can be modified)
Seeing	No services needed	Seeing

The same commercial sources and government publications can also be used to relate interest and temperament factors to occupational areas and clusters.

In order for a student to perform in a given occupational area or cluster, the student must acquire, or approach the level of requirements for that occupational area or cluster.

REMEDIATION/MODIFICATION MATRIX

CONDITION Action	Present		Referral to Specialist	Recommended	
	Remediation	Modification		Remediation	Modification
SPEAKING					
READING					
WRITING					
MATH					
PERCEPTUAL/MOTOR					
PHYSICAL DEMANDS					
BEHAVIOR					

INDIVIDUAL STUDENT CLUSTER PROFILE

Student: ____________________

D.O.B. : ____________________

Date : ____________________

	No Special Services Required	Remediation Required	Modification Required
COGNITIVE SKILLS			
G			
V-S			
V-R			
V-W			
N			
PECEPTUAL MOTOR			
S			
P			
Q			
K			
F			
M			
E			
C			
PHYSICAL DEMANDS			
Strength Climbing/Balancing			
Whole Body Range of Motion			
Upper Extremities			
Talking/ Hearing			
Seeing			

DIRECT RELATIONSHIP OF TASK TO OCCUPATIONAL CLUSTERS

DIRECT RELATIONSHIP OF TASKS TO OCCUPATIONAL CLUSTERS

Prevocational exploration can be defined as direct experiences of selected tasks of an occupation or group of occupations providing information about the world of work. These activities may involve shadowing, field trips, exploratory job samples and/or career information.

When considered as a developmental process during early adolescence, one can consider exploration as moving from divergent exploration (exploring a diverse or general range of occupations or occupational clusters) to convergent exploration (converging into a general vocational objective centering on an occupation or specific occupational cluster). Any activity which is related to occupational clusters but not directly related to occupational training has prevocational implications. Such activities become exploratory when they are structured in such a way that the student's experiences have direct relationship to the activities of an occupation or occupational cluster.

The assumption of this Project is that any classroom activity can be analyzed to determine a direct relationship to an occupation or occupational cluster. That relationship can be expressed either as a prerequisite in developing job skills required to perform related job duties or as a job activity of a particular occupation. For example, drawing in perspective is a technique representing a prerequisite of occupations in the Artistic Cluster: Visual Arts 01.02.* Three view drawing is an activity in drafting representing a task found in occupations in the Mechanical Cluster: Engineering, Technology 05.03.*

This section in each of the assessment packets has been arranged to show the relationship of the following areas as a guide for further prevocational exploration.

(1) 15 U.S.O.E Occupational Clusters

(2) Career Areas in the Guide to Occupational Exploration

(3) Dictionary of Occupational Titles, 4th Edition

The 15 U.S.O.E. Occupational Cluster arrangement is subdivided into areas representing activities and services. There is no reference to occupational characteristics or heirarchy of complexity. For example, health occupations includes both nurses aide and neurosurgeon. It is important to note that information in many career resource centers is arranged according to this system.

* (See Guide to Occupational Exploration (U.S. Dept. of Labor) 1979.)

The Guide to Occupational Exploration is an arrangement based on the characteristics or requirements of occupational clusters. The subdivisions of this system are as follows:

Career Clusters
Work Group Arrangements
Sub-groups (Occupations)

There are twelve clusters arranged numerically. For example, a commercial artist would be found by locating the numbers listed below:

Cluster Area: Artistic 01
Work Group Arrangements: Visual Arts 01.02
Sub-group: Commercial Artist 01.02 .03

An alphabetical arrangement is listed under Appendix D to locate a specific occupational title and cluster area.

The Dictionary of Occupational Titles is an arrangement of nine categories (p. XVI-XXII) and is an important reference listing the primary activities of each occupation. Over 20,000 job positions are listed in this system.

A specific job position can be found using either the "Alphabetical Index of Occupational Titles", in the Dictionary of Occupational Titles (p. 965), or "Appendix D: Alphabetic Arrangement of Occupations" in the Guide to Occupational Exploration (p.336). In either case, a nine digit number must be located to find a description of a specific job position since all titles are listed numerically. For example, commercial artist would have the number, 141.061-022, representing the following subdivisions:

Particular occupational group (Professional, technical, managerial occupations)	141.
Worker function ratings of task (data, people, things)	.061
Numerical title of a specific job position (no two job positions have the same nine digit number)	-022

An additional reference system is the Occupational Outlook Handbook which is updated approximately every two years. Information covering the nature of work, places of employment, training required, employment outlook, earnings and working conditions for hundreds of occupations is included. Specific occupations can be located using the "Dictionary of Occupational Titles (D.O.T.) Index" which is arranged according to the nine digit code or "Index to Occupational Industries" which is arranged alphabetically.

Use the following instructions for finding relationships between Activity/Task and Occupations/Career Clusters using:

Guide to Occupational Exploration

1. Using the Guide to Occupational Exploration, turn to "Appendix D: Alphabetic Arrangement of Occupations" (p. 336).

2. Locate a job title or titles directly related to the primary activity/task and curriculum area.

3. Write down the bold print six digit number at the end of the entry.

4. Turn to the Table of Contents (p. V) and locate the Work Arrangement Groups corresponding to the first four digits of each six digit code.

5. Review each sub-group listed (the last two digits of each six digit code) and see if any other occupations have a relationship to the primary activity/task.

6. Turn back to the Table of Contents (p. V) and review all 12 cluster areas and Work Group Arrangements to see if any others have a relationship to primary activity or task.

Dictionary of Occupational Titles*

7. For any job title found either in Appendix D or listed under a Work Group Arrangement, locate the corresponding nine digit code and write it down.

8. Locate the nine digit code in the D.O.T. (all occupations are arranged numerically).

9. Read the description of primary job activities.

10. Determine if the job activities listed correspond or have a relationship to the primary activity/task.

11. Check to see if other occupations listed under the same heading for the occupation selected have a similar relationship.

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* The index in the Dictionary of Occupational Titles and Guide to Occupational Exploration are similar except that the six digit number referring to Cluster, Work Group Arrangement and Sub-Group will be found in the "Appendix D: Alphabetic Occupational Arrangement".

12. Any occupations found in the Dictionary of Occupational Titles can be found in the Guide to Occupational Exploration by using the "Appendix D: Alphabetic Arrangement of Occupations" to locate the six digit number referring to Work Arrangement Groups.

15 U.S.O.E. Occupational Clusters

The following are two possible procedures one can use in relating an activity/ task to the 15 U.S.O.E. Occupational Clusters. This provides the information necessary to locate career information in most career resource centers.

1. Locate several occupations relating to primary activity/task.
2. Analyze key activities to determine if a relationship appears to exist amongst them.
3. Review the 15 U.S.O.E. Clusters.
4. Determine if the related occupations of the activity are represented in one or more of the 15 clusters.

or

1. Take subject matter/activity and analyze primary activities.
2. Review 15 U.S.O.E. Clusters.
3. Determine if primary activities are related to one or more of the 15 U.S.O.E. Clusters.

15 U.S.O.E. OCCUPATIONAL CLUSTERS

1. Agribusiness and Natural Resources
2. Business and Office
3. Communication and Media
4. Construction
5. Consumer and Homemaking
6. Environment
7. Fine Arts and Humanities
8. Health
9. Hospitality and Recreation
10. Manufacturing
11. Marine Science
12. Marketing and Distribution
13. Personal Services
14. Public Service
15. Transportation

WORK ARRANGEMENT GROUPS

Guide to Occupational Exploration

01	Artistic
02	Scientific
03	Plants and Animals
04	Protective
05	Mechanical
06	Industrial
07	Business Detail
08	Selling
09	Accommodating
10	Humanitarian
11	Leading - Influencing
12	Physical Performing

DIRECT RELATIONSHIP OF TASK TO OCCUPATIONAL CLUSTERS

Fine Arts: "Drawing in Perspective"

This activity relates directly to career clusters, Work Group Arrangements, and occupations listed below either as a primary activity or prerequisite.

See: 15 U.S.O.E. Occupational Clusters

Fine Arts
Communication and Media

Guide to Occupational Exploration

Career Area: Artistic	01.
Worker Trait Groups: Visual Arts	01.02
Sub-Group: Instruction & Appraising	01.02.01
Studio Art	01.02.02
Commercial Art	01.02.03
Worker Trait Groups: Craft Arts	01.06
Sub-Group: Hand Lettering, Painting, & Decorating	01.06.03

Dictionary of Occupational Titles

Locate the nine digit number to find a description of a specific occupation by using "Alphabetical Index of Occupational Titles" (p. 965) or "Appendix D: Alphabetic Arrangement of Occupations" in the Guide to Occupational Exploration (p. 336).

DIRECT RELATIONSHIP OF TASK TO OCCUPATIONAL CLUSTERS

Home Economics: Making a Muffin

This activity relates directly to career clusters, Work Group Arrangements, and occupations listed below either as a primary activity or prerequisite.

See: 15 U.S.O.E. Occupational Clusters

Consumer and Homemaking

Guide to Occupational Exploration

Career Area: Mechanical	05.
Worker Trait Group: Craft Technology	05.05
Sub-group: Food Preparation	05.05.17
Worker Trait Group: Crafts	05.10
Sub-group: Food Preparation	05.10.08

Dictionary of Occupational Titles

Locate the nine digit number to find a description of a specific occupation by using "Alphabetical Index of Occupational Titles" (p. 965) or "Appendix D: Alphabetic Arrangement of Occupations" in the Guide to Occupational Exploration (p. 336).

DIRECT RELATIONSHIP OF TASK TO OCCUPATIONAL CLUSTERS

Home Economics: Making a Pancake

This activity relates directly to career clusters, Work Group Arrangements, and occupations listed below either as a primary activity or prerequisite.

See: 15 U.S.O.E. Occupational Clusters

Consumer and Homemaking

Guide to Occupational Exploration

Career Area: Mechanical	05.
Worker Trait Group: Craft Technology	05.05
Sub-group: Food Preparation	05.05.17
Worker Trait Group: Crafts	05.10
Sub-group: Food Preparation	05.10.08

Dictionary of Occupational Titles

Locate the nine digit number to find a description of a specific occupation by using "Alphabetical Index of Occupational Titles" (p. 965) or "Appendix D: Alphabetic Arrangement of Occupations" in the Guide to Occupational Exploration (p. 336).

DIRECT RELATIONSHIP OF TASK TO OCCUPATIONAL CLUSTERS

Industrial Arts: Custom Coat Hanger

This activity relates directly to career clusters, Work Group Arrangements, and occupations listed below either as a primary activity or prerequisite.

See: 15 U.S.O.E. Occupational Clusters

Manufacturing

Guide to Occupational Exploration

Cluster Area:	Industrial	06.
Worker Trait Group:	Elemental Work: Industrial	06.04
Sub-Group:	Machine Work, Metal & Plastics	06.04.02
	Manual Work, Metal & Plastics	06.04.24

Dictionary of Occupational Titles

Locate the nine digit number to find a description of a specific occupation by using "Alphabetical Index of Occupational Titles" (p. 965) or "Appendix D: Alphabetic Arrangement of Occupations" in the Guide to Occupational Exploration (p. 336).

DIRECT RELATIONSHIP OF TASK TO OCCUPATIONAL CLUSTERS

Industrial Arts: Dimensioning

This activity relates directly to career clusters, Work Group Arrangements, and occupations listed below either as a primary activity or prerequisite.

See: 15 U.S.O.E. Occupational Clusters

Manufacturing

Guide to Occupational Exploration

Cluster Area: Mechanical	05.
Worker Trait Group: Engineering Technology	05.03
Sub-Group: Drafting	05.03.02

Dictionary of Occupational Titles

Locate the nine digit number to find a description of a specific occupation by using "Alphabetical Index of Occupational Titles" (p. 965) or "Appendix D: Alphabetic Arrangement of Occupations" in the Guide to Occupational Exploration (p. 336).

DIRECT RELATIONSHIP OF TASK TO OCCUPATIONAL CLUSTERS

Industrial Arts: Manufacturing

This activity relates directly to career clusters, Work Group Arrangements, and occupations listed below either as a primary activity or prerequisite.

See: 15 U.S.O.E. Occupational Clusters

Construction
Manufacturing

Guide to Occupational Exploration

Career Area:	Mechanical	05.
Worker Trait Groups:	Engineering	05.01
Sub-Group:	Research	05.01.01
	Design	05.01.07
Worker Trait Group:	Engineering Technology	05.03
Sub-Group:	Drafting	05.03.02

Dictionary of Occupational Titles

Locate the nine digit number to find a description of a specific occupation by using "Alphabetical Index of Occupational Titles" (p.965) or "Appendix D: Alphabetic Arrangement of Occupations" in the Guide to Occupational Exploration (p.336).

DIRECT RELATIONSHIP OF TASK TO OCCUPATIONAL CLUSTERS

Industrial Arts: Three View Drawing

This activity relates directly to career clusters, Work Group Arrangements. and occupations listed below either as a primary activity or prerequisite.

See: 15 U.S.O.E. Occupational Clusters

Manufacturing

Guide to Occupational Exploration

Cluster Area: Mechanical	05.
Worker Trait Group: Engineering Technology	05.03
Sub-Group: Drafting	05.03.02

Dictionary of Occupational Titles

Locate the nine digit number to find a description of a specific occupation by using "Alphabetical Index of Occupational Titles" (p. 965) or "Appendix D: Alphabetic Arrangement of Occupations" in the Guide to Occupational Exploration (p. 336).

DIRECT RELATIONSHIP OF TASK TO OCCUPATIONAL CLUSTERS

Mathematics: Metric System

This activity relates directly to career clusters, Work Group Arrangements, and occupations listed below either as a primary activity or prerequisite.

Mathematics as a general subject area has a direct relationship to several cluster areas as a prerequisite. The following cluster areas are cited because of the obvious relationships.

See: 15 U.S.O.E. Occupational Clusters

Agribusiness and Natural Resources
Business and Office
Construction
Consumer and Homemaking
Environment
Health
Manufacturing
Marine Science

Guide to Occupational Exploration

Scientific: 02.
Mechanical: 05.
Industrial: 06.
Social Business: 11.

Dictionary of Occupational Titles

Locate the nine digit number to find a description of a specific occupation by using "Alphabetical Index of Occupational Titles" (p. 965) or "Appendix D: Alphabetic Arrangement of Occupations" in the Guide to Occupational Exploration (p. 336).

DIRECT RELATIONSHIP OF TASK TO OCCUPATIONAL CLUSTERS

Music: Music as a Means of Communication & Expression

This activity relates directly to career clusters, Work Group Arrangements, and occupations listed below either as a primary activity or prerequisite.

See: 15 U.S.O.E. Occupational Clusters

Fine Arts
Communication and Media

Guide to Occupational Exploration

Career Area: Artistic	01.
Worker Trait Group: Literary Arts	01.01
Sub-group: Creative Writing (lyricist)	01.01.02
Worker Trait Group: Performing Arts - Music	01.04
Sub-group: Instructing & Directing	01.04.01
Composing & Arranging	01.04.02
Vocal Performance	01.04.03
Instrumental Performing	01.04.04
Worker Trait Group: Dance	01.05
Sub-group: Instructing & Choreography	01.05.01

Dictionary of Occupational Titles

Locate the nine digit number to find a description of a specific occupation by using "Alphabetical Index of Occupational Titles" (p. 965) or "Appendix D: Alphabetic Arrangement of Occupations" in the Guide to Occupational Exploration (p. 336).

DIRECT RELATIONSHIP OF TASK TO OCCUPATIONAL CLUSTERS

Music: Sound, Music's Raw Materials

This activity relates directly to career clusters, Work Group Arrangements, and occupations listed below either as a primary activity or prerequisite.

See: 15 U.S.O.E. Occupational Clusters

Communication and Media

Guide to Occupational Exploration

Career Area: Artistic	01.
Worker Trait Group: Performing Arts: Music	01.04
Sub-Groups: Composing and Arranging	01.04.02

Worker Trait Group: Craft Arts	01.06
Sub-Groups: Arts and Crafts	01.06.02

Career Area: Mechanical	05.
Worker Trait Group: Crafts	05.10
Sub-Groups: Reproduction	05.10.03

Dictionary of Occupational Titles

Locate the nine digit number to find a description of a specific occupation by using "Alphabetical Index of Occupational Titles" (p.965) or "Appendix D: Alphabetic Arrangement of Occupations" in the Guide to Occupational Exploration (p.336).

DIRECT RELATIONSHIP OF TASK TO OCCUPATIONAL CLUSTERS

Science: Series Circuits

This activity relates directly to career clusters, Work Group Arrangements, and occupations listed below either as a primary activity or prerequisite.

See: 15 U.S.O.E. Occupational Clusters

Construction
Manufacturing
Guide to Occupational Exploration

Cluster:	Mechanical	05.
Worker Trait Group:	Craft Technology	05.05
Sub-Group:	Electrical - Electronic Systems, Installation & Repair	05.05.05
	Electrical - Electronic Equipment Repair	05.05.10
Worker Trait Group:	Crafts	05.10
Sub-Group:	Electrical - Electronic	05.10.03
Worker Trait Group:	Elemental Mechanical	05.12
Sub-Group:	Electrical Work	05.12.16

Dictionary of Occupational Titles

Locate the nine digit number to find a description of a specific occupation by using "Alphabetical Index of Occupational Titles" (p. 965) or "Appendix D: Alphabetic Arrangement of Occupations" in the Guide to Occupational Exploration (p. 336).

DIRECT RELATIONSHIP OF TASK TO OCCUPATIONAL CLUSTERS

Social Studies: States and Capitals

This activity relates directly to career clusters, Work Group Arrangements, and occupations listed below either as a primary activity or prerequisite.

See: 15 U.S.O.E Occupational Clusters

Communication and Media

Guide to Occupational Exploration (Dept. of Labor)

Career Area:	Leading & Influencing	11.
Worker Tr[illegible] Group:	Communications	11.08
Sub-Group:	Editing	11.08.01
	Writing	11.08.02
	Writing & Broadcasting	11.08.03

Following cluster areas may also have a relationship to occupations

Cluster Area:	Selling	08.
	Leading & Influencing	11.
Worker Trait Group:	Service Administration	11.07
	Regulations Enforcement	11.10

Dictionary of Occupational Titles

Locate the nine digit number to find a description of a specific occupation by using "Alphabetical Index of Occupational Titles" (p. 965) or "Appendix D: Alphabetic Arrangement of Occupations" in the Guide to Occupational Exploration (p. 336).

FIELD TRIAL

RESULTS

PARTICIPANTS

Hopedale School District

Ronald Santacross - Guidance Counselor

Maynard School District

Chester Leonard - Guidance Counselor

Milford School District

Ferdi Gunduz - Mathemathtics Teacher
Michael Iadarola, Industrial Arts Teacher
Eleanor Johnson, Acting Assistant Principal
Thomas Jump, Core Evaluation Team Liaison
Francis Nealon, Guidance Counselor
Steven Minichiello, Resource Room Teacher
Anthony Niro, Science Teacher

Northborough School District

Emilee Blanchet, Music Teacher
Marion Edmunds, Home Economics Teacher
Patrick Mahoney, Resource Room Teacher
Carol Muello, Fine Arts Teacher
Arthur Mulrain, Guidance Counselor
Peter Nuccio, Industrial Arts Teacher
Donald Padgett, Industrial Arts Teacher
Leonard Thereault, Social Studies Teacher

CURRICULUM AREAS	LESSON UNIT
Fine Arts	"Drawing in Two Point Perspective" "Painting in Perspective"
Home Economics	"Making a Muffin" "Making a Pancake"
Industrial Arts	"Dimensioning" "Making a Custom Coat Hanger" "Three View Drawing"
Mathematics	"Metric System"
Music	"Music as a Means of Communication" "Sound, Music, and Raw Materials"
Science	"Series Circuit - (Electrical)"
Social Studies	"States and Capitols"

Field test trials of the instrument were set up in Northborugh Middle School and Milford Middle School to collect data and to test the following assumptions:

1. That curriculums can be analyzed and subjected to a task analysis.
2. That occupational characteristics can be factored out from a task analysis.
3. That a classroom teacher can carry out a task analysis, as it is constructed, without any distortion of the factors involved.
4. That teachers can identify occupational characteristics through critical observation of a student's performance.
5. That information based on student's performance will correlate with other testing sources.

CONDITIONS OF FIELD TEST - FIRST TRIAL

1. Each participating teacher was involved in four inservice days, preparing and developing curriculum analysis. Instruction was provided in using task performances, cognitive skills, perceptual/motor, physical demands, specific behaviors, interest, and temperament checklists. Instructions were given not to deviate, in any way, from normal classroom routine.
2. Each area involved classroom onsite visits (first trial only). Each observation involved doing above checklists for step or steps being done by the student for that class period/day.
3. Observations of field site were cross checked with appropriate checklists submitted by the teacher at the end of the trial period.
4. Critical observations of characteristics by all teachers, working with a specific student, were cross matched for each student being observed.

FIELD TRIAL RESULTS

1. That curriculums can be analyzed and subjected to a task analysis (chart 4).

Two project staff members were able to observe approximately seventy-five percent of the presentations of the nine lessons during the first trial. Their responsibility was to observe and record deviations in the presentation and the written curriculum analyses. All nine lesson units totalled one hundred and ten (110) steps. Of the ten discrepancies, between the curriculum analyses and lesson presentation, five were due to omitting the step involved. The remaining discrepancies resulted from a difference between the step presented and the step as it was written in the curriculum analysis.

Implications

The results indicate that through curriculum analysis, a lesson unit can be constructed as a task analysis and can be standardized for purposes of measurement. The key factor in using curriculum analysis as a process is dependent upon in-service training in order to insure reliability.

2. That occupational characteristics can be factored out from a task analysis.

That occupational factors can be identified through task analysis has been established prior to this project (i.e. U.S. Department of Labor research since 1933). However, its application to classroom areas is relatively new. Many of the factors are more readily identifiable than others. Verbal and numerical skills are fairly well stated. Perceptual/motor skills can be identified, but levels of perceptual/motor skills required in a given task are not easily measured. It was possible to identify the perceptual/motor skills involved in a task and indications of difficulty, on the part of the student, were observable.

Implications

Verbal and numerical skills in lesson units can be identified and level of skill can be measured. Perceptual/motor skills can be identified, but further research is necessary if the level of skill is to become measurable.

3. That a classroom teacher can carry out a task analysis, as it is constructed, without any distortion of the factors involved (chart 4).

In all of the one hundred and ten (110) steps of the nine (9) lesson units, six hundred and eighty-two (682) factors were identified. Of the ten discrepancies between the curriculum analysis and the lesson units, five steps were omitted. In the case of the omissions, the factors were not distorted because they did not occur and, therefore, were not observed. In the case of the "Student Action Changed" in "Making a Pancake", liquid shortening was substituted for solid shortening, eliminating one step. In only one instance were factors distorted. In this case, the original instructions were to write down words heard on a record (Music), but the action performed was reading the words - changing the factors from Verbal-listening and writing to Verbal-reading and writing.

Implications

Once a curriculum analysis had been done and occupational factors analyzed, the nine teachers were able to conduct the lesson unit as a standardized task performance without distortion of the factors involved.

4. That teachers can identify occupational characteristics through critical observations of a student's performance (chart 5).

One or more of seventeen factors (Cognitive Skills, Perceptual/Motor Skills, and Physical Demands) occurred in each lesson unit and are marked with an "X" accordingly on the chart. There was an opportunity to match the rating of the observer to that of the teacher for each factor in one hundred and sixty-five (165) cases. Twelve discrepancies occurred as follows:

General - three discrepancies out of seventeen
Verbal - four discrepancies out of seventeen
Perceptual/Motor - one discrepancy out of forty-nine
Physical Demands* - four discrepancies out of sixty-eight

Implications

The results demonstrate that once teachers know the functional definitions of occupational characteristics, they demonstrate a high degree of accuracy in identifying the factors involved in performing the task. The format used in this section would appear to lend itself to analyzing the factors most likely to occur in a given curriculum area. Over time, data should be collected to determine if a curriculum area has its own pattern of occupational characteristics.

---

* All four discrepancies occurred in one lesson unit and were behaviors rather than inability to meet physical demands.

5. That information based on a student's performance will correlate with other testing sources (chart 6).

The areas of difficulty identified in the classroom through situational assessment have been correlated with I.E.P Profiles and one or more of the following testing instruments:

California Achievement Test
Wide Range Achievement Test
Standard Achievement Test

In the case of each student, the most recent testing results were used and were obtained within four months prior to the situational assessment.

There was a strong correlation between the I.E.P. profiles and the testing results, and difficulties in those areas were observable and measurable in the situational assessments. However, areas of difficulty were observable in the situational assessments which were not identified in testing, and were not identified in the I.E.P. profile. In six cases, perceptual/motor skills were identified as the factor involved and only once was the perceptual/motor factor indicated in the I.E.P. profiles for all the students observed.

In the cases where the California Achievement Test indicated difficulty in verbal expression, the student demonstrated the same difficulty in the situational assessment. In the cases where the student was not given the California Achievement Test, it was difficult to determine whether the student's difficulty in verbal expression was the result of verbal skills or behaviors.

Implications

It would appear that wherever testing results are available, the I.E.P. profile is based on testing results and not student performance. Where no testing information is available, there is the possibility that the area of difficulty will not be identified in the I.E.P. It would appear that the situational assessment approach and testing results complement each other and further, that the I.E.P. should be developed using both as sources of information.

Observation of Behaviors

Assessing behaviors proved to be the most difficult for the participants (see Chart 7). Identifying the behaviors involved resulted in more discrepancies, between the participants and project staff observations, than occurred with the observations of other occupational characteristics. This may have been partly due to the format of the data collection instrument. The subsequent assessment instrument for observation of behaviors has been designed to enable the observer to focus on three areas: approach to task, relationship to task environment, and production. The three categories are defined by twelve general work readiness behaviors.

It was also apparent that recording the number of times that a specific behavior occurred was difficult to handle if done by the participant while teaching. Further trials may indicate that it would be preferable for another staff member to act as a recorder where rating is appropriate or necessary.

Also, it is evident from both the ratings and observations of the project staff, that the degree of inappropriateness of behaviors, as seen by the participants, varies from one teacher to another and from one class-site to another. This field trial indicates a need to make observations of behaviors a more objective process and to focus on the relationship of behaviors to the task.

In comparing the behaviors observed, and the behavioral objectives in the I.E.P., it is apparent that, in most cases, social interaction is emphasized. Although the observations indicated significant problems in approaching the task on the part of one student, and significant problems with production on the part of others, they were not stated in the I.E.P.

Implications:

The importance of developing critical work related behaviors, as part of the readiness stage, is obvious. Two out of the three areas used in this process, (approach to task and production), receive little attention in the I.E.P, although these areas would be critical to job performance. A need exists to train people to observe and rate behaviors objectively by focusing on the effect of behaviors on the outcomes of task performance.

Interests:

Interests and temperaments, and their relationship to occupational clusters, were areas with which the participating teachers had little familiarity. Although verbal interaction between the teacher and student was strongly emphasized, some of the participants were uncomfortable in using non-verbal cues in determining whether or not students liked the predominant activities in a lesson unit. Also, teachers were uncomfortable in distinguishing between an interest and a temperament. It was obvious to both project staff observers that both areas revealed significant information about the student.

The field trial results show some indication that each curriculum area represents a distinct pattern of interests (see Chart 8). Further, data from subsequent field trials will be analyzed to determine if, in fact, curriculum areas represent a relationship to interests of various occupational clusters.

There also was some indication that a correlation between interests and cognitive skill levels exists. Students who were observed to have difficulty with verbal-reading skills also indicated a dislike for "activities involving communication of ideas and information (6)" particularly where written information was involved. These same students indicated that they liked working with things and objects, working with methods, processes and machines, and working on activities resulting in tangible production and satisfaction (see Chart 9). Again, subsequent field trial results will be analyzed to see if this trend continues.

It is further evident, from the field trial results, that the participating teachers in some cases either did not rate interests or temperaments or did not engage in verbal interaction with the students. None of the participating teachers made any reference to "Direct Relationship of the Task to Occupational Clusters".

Implications:

The process of determining the relationship of interests to occupational clusters is an important part of general assessment. The general curriculum areas potentially have significant implications for the development of a particular pattern of interests on the part of students and provide significant insights into a student's performance. There is an indication that a range of curriculum areas have a variety of interest configurations which would be significant for general assessment.

Temperaments:

Participating teachers had difficulty distinguishing between interests and temperaments. Some teachers did not attempt to rate temperaments and some teachers did not attempt verbal interaction with the student. Also, there was confusion between temperaments as an adjustment factor and behaviors which may or may not have a relationship to the ability to adapt to a particular situation. This area needs to be followed up in subsequent field trials.

There was some indication that the total learning environment of the student emphasized some temperaments over others (see Chart 10). "Making judgements based on criteria which can be measured and checked (8)" and "Situations requiring attainment of precision according to set limits, standards or telerances (10)" were the predominant temperaments in seven of the nine curriculum areas. Work of a repetitive nature (2) also was a predominant temperament in five of the nine areas.

There is an indication that much of the learning environment of a student is structured and that a demand for accuracy as well as performing against a measurable criteria pervades most of the student's schedule. This has implications for understanding a student's ability to adapt to learning environments and occupational clusters.

There, also, is a strong indication that teachers have an intuitive sensitivity to a student's ability to adapt to the situation within their specific class area. The observation of the process in classrooms indicates that teachers attempt to make adjustments for the student who has difficulty in adapting to different situations.

Implications:

Teachers have little or no training in this area. Also, the field trial results indicate that confusion exists about the relationship of temperaments and behaviors. It is evident, however, that the adaptability factors demonstrated by the student in adjusting to a variety of learning environments is significant in gaining insight into the student's performance.

Conclusions:

1. That the field trial results demonstrate a multitude of relationships between the educational process in public education and the World of Work.
2. That the acquisition of skills in the educational process, which is both developmental and sequential, is directly related to vocational development.
3. That the difficulties which a student has in the educational process represent potential difficulties in vocational development, and, if not remediated, result in restricting occupational choices.
4. That the entire educational process has prevocational implications for the students in areas of skills, interests, temperaments and behaviors.

5. That the student's interests as related to occupational clusters are strongly influenced by the variety of experiences in the overall curriculum of the educational process.

6. That the student's ability to adapt to the learning environment has implications for adaptability to the World of Work.

7. That little evidence exists that school systems draw relationships between the educational process and vocational development.

8. That the interrelationship between vocational development and the educational process is not emphasized either in the academic training or inservice of teachers in public school systems.

9. That the process of developing an I.E.P. already has a direct effect on the outcome of the vocational development of an individual student.

10. That the development of the student's I.E.P. places little emphasis on the student's performance in the educational process itself.

11. That the educational process already has the potential of making a significant and positive impact on the outcome of a student's vocational future.

USE OF INSTRUMENTATION

A questionnaire was developed and given to nine teachers consisting of four areas:

1. Evaluation of Inservice
2. Evaluation of Instrument Process
3. Evaluation of Rating Forms
4. Evaluation of Suggested Instrument Format

1. Although the inservice was generally rated high, one area where a difference of ratings occurred was order of presentation. For some of the participants, the focus of the project was not clear until the third session. Other participants felt that emphasizing the curriculum itself, as the first step, was necessary in order to effectively use the process.

2. The response to two parts of section 2 was unanimous. All teachers felt that the curriculum analysis represented the actual lesson presentation and that the process could be used effectively for all students, regardless of special needs.

In terms of process management, questions b, c, f, and g, of part two indicated positive responses from the majority of teachers. Eight felt that the process did not interfere with lesson presentation. One participant indicated that the process doubled the time the lesson normally would have taken to be completed.

Three teachers indicated that the process did not require additional effort during the lesson presentation. The remaining six teachers indicated that the process did require additional effort for the following reasons:

> "I found myself watching this student more carefully than the others - and making more notes while missing some other students."
>
> "It forced me to evaluate the individual tasks more. Note - this is a positive nature i.e. - it helped me to locate the source of the student's problem faster and get him on the proper course."
>
> "More conscious of looking for students' reactions to information: to instruct clearly and accurately."

> "A closer evaluation of the student was made. Also, a one to one relationship was carried on in an attempt to evaluate, to answer the questionnaire."

> "Tried to be certain the student participated-had a chance to be involved - observed the student more than usual in order to be able to fill out the checklists."

> "In this subject area, a greater amount of time was taken from other students. Also, because of the lesson observed, two periods (non-consecutive) were needed."

Under Part 2, the question of the range of time needed to complete the rating forms was 10 minutes to 2 1/2 hours. It should be noted that the participant taking 2 1/2 hours substituted for another participant and had not been involved in the inservice. The average time of all participants was 45 minutes and the median time was 37 minutes.

Under Part 2, question g, six out of nine participants indicated the process did not take a significant amount of non-classroom time. The remaining three indicated that it did take a significant amount of non-classroom time and gave the following reasons:

> "1/2 hour or more which is not that significant with only a few students."

> "It was all done after class - at least 45 minutes each."

> "2.5 hours."

Under Part 2, question g, which asks if the variables as analyzed were clearly observable, five indicated that they were, two were not sure, and two did not answer. This contrasts sharply with their actual performance which indicates a high capability of identifying occupational characteristics in a student's performance (see chart 5 - Field Trial Results).

3. Under Part 3, seven participants felt the information was stated clearly. Two participants were not sure. One of the two stated, "I am still learning the terms and definitions".

Only one participant had prior diagnostic information about the student being observed. Seven participants had no prior knowledge from a student's I.E.P. One participant was aware of the strengths and weaknesses in the I.E.P.

profile and was aware of suggested modifications. One participant did not answer whether or not information was available.

4. All participants rated the suggested format either 5 or 4. Throughout the trial, they accepted the necessity of the Date Collection Instrument being extensive, but expressed the hope that the final assessment instrument would be shorter and more manageable.

Chart 1

OVERVIEW OF FIRST TRIAL

Northborough Middle School

Subject Areas	Classes	Teachers	Number of Students in Class
Fine Arts: "Drawing in Perspective"	4	1	54 (4) (11) (21) (18)
Home Economics: "Making a Pancake"	2	1	22 (10) (12)
Industrial Arts: "Three-View Drawing"	2	2	21 (15) (6)
Music: "Music as a Means of Communication"	4	1	55 (10) (4) (20) (21)
Social Studies: "States and Capitals"	1	1	25
	13	6	

Student Population:	F.A.	Ho. Ec.	Ind. A.	Music	Soc. St.
7th Grade					
1. Girl	X	X		X	
2. Boy	X	X		X	
3. Girl	X		X	X	
4. Boy	X		X	X	
8th Grade					
1. Boy					X

Total Observations by Project Staff 14
(Students were observed at least once in each class site)

Chart 2

OVERVIEW OF FIRST TRIAL

Milford Middle School

Subject Areas	Classes	Teachers	Number of Students in Class
Industrial Arts: " Making a Custom Coat Hanger	1	1	4
Math: "Metric System"	1	1	14
Science: "Electrical Series Circuit"	1	1	13
	3	3	

Student Poplation	Industrial Arts	Math	Science
7th Grade			
1. boy		x	[illegible]
2, boy		x	x
8th Grade			
3. boy	x		

Total observations by project staff 5
(two students were observed in two different class sites)

Chart 3

OVERVIEW OF SECOND TRIAL

Northborough Middle School

Subject Area - Second Trial	Classes	Teachers	Number of Students in Class
Fine Arts: "Painting in Perspective"	4	1	54 (4) (11) (21) (18)
Home Economics: "Making a Muffin"	2	1	22 (10) (12)
Industrial Arts: "Dimensioning"	2	2	21 (15) (6)
Music: "Sound, Music's Raw Materials"	4	1	55 (10) (4) (20) (21)
	12	5	

Student Population:

7th Grade	F.A.	Ho. Ec.	Ind. A.	Music
1. Girl	X	X		X
2. Boy	X	X		X
3. Girl	X		X	X
4. Boy	X		X	X

Chart 4

	# of Steps in Lesson	# of Steps Carried out as Written	Reason for Discrepancy	# of Times Lesson Occurred	# of Times Discrepancy Occurred	Discrepancy Amounted to Distortion of Factors Involved	Total Number of Factors Involved in Steps (actual)	Total # of Factors Distorted
Northborough								
I.A.(1), 1	6	5	Omitted	1	1	No	40	0
2	5	4	Omitted	1	1	No	26	0
I.A.(2) 1	6	6		1		No	50	0
2	5	4	Omitted	1	1	No	26	0
Art 1	11	11		4		No	83	0
Music 1	5	4	Originally written wrong (Action different)	4	4	Yes	28	2
2	7	7		3		No	44	0
H.E.	15	14	Action on part of Student Changed	2	1	No	126	0
S.S.	4	4		1		No	34	0
Milford								
Science	30	26	Omitted	2	1	No	126	0
Math	6	6		2		No	41	0
I.A.	10	9	Omitted	1	1	No	63	0
TOTALS:	110	100		23	10		682	2

Note: When reviewing a task to determine if a distortion occurred, it was necessary to analyze each individual step of the task and the factors listed as involved.

In the above cases, where a step was "Omitted", and no action performed, it resulted in "No Distortion of Factors Involved". This occurred because one cannot (and is not) measuring what was not performed. The same might hold true for steps added during performance, because one is not measuring factors that are not listed. Do not assume that every incidence, where steps are omitted or added, results in "No Distortion of Factors Involved". A step omitted or added could result in a change in the entire task, or an individual being unable to proceed further.

Chart 5

FIRST TRIALS

	G	V	N	S	P	Q	K	Y	M	E	C	1	2	3	4	5	6	Discrepancy in Observation
NORTHBOROUGH																		
MUSIC	X	X			X	X						X			X	X	X	
Girl 1																		
Teacher	-	+			+	+						+			+	+	+	
Observer	+	+			+	+						+			+	+	+	1
Boy 1																		
Teacher	+	-			+	+						+			+	+	+	
Observer	+	-			+	+						+			+	+	+	
Girl 2																		
Teacher	+	+			+	+						+			+	+	+	
Observer	+	+			+	+						+			+	+	+	
Boy 2																		
Teacher	-	-			+	-						+			+	+	+	
Observer	+	-			+	-						+			+	+	+	1
ART	X	X	X	X	X			X				X			X	X	X	
Girl 1																		
Teacher	+	+	+	+	+			+				+			+	+	+	
Observer	+	+	+	+	+			+				+			+	+	+	

FIRST TRIALS (Cont'd)

	G	V	N	S	P	Q	K	F	M	E	C	1	2	3	4	5	6	Discrepancy in Observation
NORTHBOROUGH																		
ART	X	X	X	X	X			X				X			X	X	X	
Boy 1																		
Teacher	+	+	+	+	+			+				+			+	+	+	
Observer	+	+	+	+	+			+				+			+	+	+	
Girl 2																		
Teacher	+	+	+	+	+			+				+			+	+	+	
Observer	+	+	+	+	+			+				+			+	+	+	
Boy 2																		
Teacher	+	+	+	+	+			+				+			+	+	+	
Observer	+	+	+	+	+			+				+			+	+	+	
HOME EC.	X	X	X	X			X	X	X			X			X	X	X	
Girl 1																		
Teacher	+	-	+	+			+	+	+			+			+	+	+	
Observer	+	-	+	+			+	+	+			+			+	+	+	
I.A.	X	X	X	X	X	X	X	X				X			X	X	X	
Girl 2																		
Teacher	+	+	+	+	+	+	+	+				+			+	+	+	
Observer	+	+	+	+	+	+	+	+				+			+	+	+	

FIRST TRIALS (Cont'd)

	G	V	N	S	P	Q	K	F	M	E	C	1	2	3	4	5	6	Discrepancy in Observation
NORTHBOROUGH																		
I.A.	X	X	X	X	X	X	X	X				X			X	X	X	
Boy 2																		
Teacher	+	-	+	+	+	+	+	+				+			+	+	+	
Observer	+	+	+	+	+	+	+	+				+			+	+	+	1
SOCIAL ST.	X	X			X	X						X			X	X	X	
8th Gr. **Boy 1**																		
Teacher	+	+			+	+						+			+	+	+	
Observer	+	+			+	+						+			+	+	+	
MILFORD																		
SCIENCE	X	X	X		X	X	X	X				X			X	X	X	
Boy 1																		
Teacher	+	-	+		+	+	+	+				+		+	+	+	+	
Observer	+	+	+		+	+	+	+				+		+	+	+	+	1
Boy 2																		
Teacher	-	-	+		-	+	+	+				+			+	+	+	
Observer	-	+	+		+	+	+	+				+			+	+	+	2

FIRST TRIALS (Cont'd)

	G	V	N	S	P	Q	K	F	M	E	C	1	2	3	4	5	6	Discrepancy in Observation
MILFORD																		
MATH	X	X	X		X	X						X			X	X	X	
Boy 1																		
Teacher	+	+	+		+	+						+			+	+	+	
Observer	+	+	+		+	+						+			+	+	+	
Boy 2																		
Teacher	-	-	-		+	+						+			+	+	+	
Observer	+	+	-		+	+						+			+	+	+	2
I.A.	X	X	X		X		X	X	X			X			X	X	X	
Boy 3																		
Teacher	-	-	-		-							-			-	-	-	
Observer	-	-	-		-							+			+	+	+	4

165 Factors Observed 12 Discrepancies In Observation

Chart 6

	Observations					I.E.P. Profile						Diagnostic Test Information									
	Sites in Which Individual Students Were Observed											WRAT			CAT				SAT		
	Home Ec. 1	Home Ec. 2	Music 1	Music 2	Art 1	Reading	Language Arts English	Math	Perceptual/Motor	Physical Constraints	Behavior	Reading	Spelling	Math	Reading	Language Expression	Spelling	Math	Reading	Spelling	Math
Northborough																					
Boy 1 (Student 2)																					
Verbal/Speaking		X	X																		
Verbal/Reading	(No Reading required)					X						X							X		
Verbal/Writing			X	X			X						X							X	
Math		X						X						X							X
Perceptual/Motor					X																
Physical Demands																					
Behavior	X	X	X								X										
Girl 1 (Student 1)																					
Verbal/Speaking	X	X	X													X					
Verbal/Reading	(No reading required)					X									X						
Verbal/Writing				X			X										X				
Math								X										X			
Perceptual/Motor					X																
Physical Demands																					
Behavior											X										

	Observations					I.E.P. Profile						Diagnostic Test Information									
	Sites in Which Individual Students Were Observed											WRAT			CAT				SAT		
Northborough	I.A. 1	I.A. 2	Music 1	Music 2	Art 1	Reading	Language Arts English	Math	Perceptual/Motor	Physical Constraints	Behavior	Reading	Spelling	Math	Reading	Language Expression	Spelling	Math	Reading	Spelling	Math
Boy 2 (Student 4)																					
Verbal/Speaking																X					
Verbal/Reading						X									X						
Verbal/Writing			X				X										X				
Math		X						X										X			
Perceptual/Motor			X		X																
Physical Demands																					
Behavior	X		X	X	X						X										
Girl 2																					
(Student 3)																					
Verbal/Speaking																X					
Verbal/Reading						X									X						
Verbal/Writing							X										X				
Math																		X			
Perceptual/Motor	X				X				X												
Physical Demands																					
Behavior				X							X										

	Observations						I.E.P. Profile							Diagnostic Test Information									
	Sites in Which Individual Students Were Observed																						
														WRAT			CAT				SAT		
Northborough 8th grade Boy 1	Soc. St. 1						Reading	Language Arts English	Math	Perceptual/Motor	Physical Constraints	Behavior		Reading	Spelling	Math	Reading	Language Expression	Spelling	Math	Reading	Spelling	Math
Verbal/Speaking	X																	X					
Verbal/Reading							X										X						
Verbal/Writing	X							X											X				
Math (No math required)																				X			
Perceptual/Motor																							
Physical Demands	X										X												
Behavior	X											X											
Milford Boy 1	Math 1	Science 1																					
Verbal/Speaking		X																					
Verbal/Reading		X					X							X									
Verbal/Writing (No writing required)															X								
Math																X							
Perceptual/Motor																							
Physical Demands																							
Behavior																							

	Observations					I.E.P. Profile							Diagnostic Test Information									
	Sites in Which Individual Students Were Observed												WRAT			CAT				SAT		
Milford	Math 1	Science 1				Reading	Language Arts English	Math	Perceptual/Motor	Physical Constraints	Behavior		Reading	Spelling	Math	Reading	Language Expression	Spelling	Math	Reading	Spelling	Math
Boy 2																						
Verbal/Speaking																						
Verbal/Reading	X	X				X							X									
Verbal/Writing	(No writing required)						X							X								
Math	X							X							X							
Perceptual/Motor		X																				
Physical Demands																						
Behavior	X	X									X											
Boy 3	I.A. 1																					
Verbal/Speaking	X																					
Verbal/Reading	(No reading required)												X									
Verbal/Writing	(No writing required)						X							X								
Math	X							X							X							
Perceptual/Motor	X																					
Physical Demands																						
Behavior	X										X											

Chart 7

NORTHBOROUGH	Attendance	Punctuality	Attends to Task	Interractions w/ Co-workers	Exhibits Approp. Behaviors	Responsibility	Supervision	Initiation	Seeks Assistance	Frustration/Tolerance	Productive Use of Free Time	Productive Use of Work Time	Production
Student 1 Girl 1													
Art	X		X	X	X	X		X					
Teacher	+		+	+	+	+		+					
Observer	+		+	+	+	+		+					
Home Ec.	Invalidated			(Rating Form Not Complete)									
Music	Invalidated			(Rating Form Not Complete)									
Student 2 Boy 1													
Art	X		X	X	X	X			X				
Teacher	+		+	+	+	+			+				
Observer	+		+	+	+	+			+				
Home Ec.	Invalidated			(Not Observed)									
Music	Invalidated			(Rating Form Not Complete)									
Student 3 Girl 2													
Art	X		X	X	X	X			X				
Teacher	+		-	-	+	-			-				
Observer	+		+	+	+	+			+				
Industrial Arts	X		X		X	X	X	X	X	X			X
Teacher	+		+		+	+	+	+	+	+			+
Observer	+		+		+	+	+	+	+	+			+
Music	X	X	X	X	X	X	X	X	X			X	
Teacher	+	+	+	+	+	+	+	+	+			+	
Observer	+	+	+	+	+	+	+	+	+			+	

	Attendance	Punctuality	Attends to Task	Interractions w/ Co-workers	Exhibits Approp. Behaviors	Responsibility	Supervision	Initiation	Seeks Assistance	Frustration/Tolerance	Productive Use of Free Time	Productive Use of Work Time	Production
Student 4 Boy 2													
Art	X		X	X	X	X			X				
Teacher	+		+	+	+	+			+				
Observer	+		+	-	-	-			+				
Industrial Arts	X		X		X	X	X	X	X	X			X
Teacher	+		-		+	-	-	+	+	+			+
Observer	+		+		-	+	+	+	+	+			-
Music	X	X	X	X	X	X	X	X	X	X		X	
Teacher	+	+	+	+	-	+	+	-	+	+		-	
Observer	+	+	-	-	-	+	+	-	+	+		-	
Student 5 (Gr.8) Boy													
Social Studies	Invalidated			(Rating Form Not Complete)									
MILFORD													
Student 1 Boy 1													
Math	X		X		X	X	X	X	X			X	
Teacher	+		+		+	+	+	+	+			+	
Observer	+		+		+	+	-	+	+			+	
Science	X	X	X	X	X	X					X		
Teacher	+	+	-	+	-	+					+		
Observer	+	+	+	+	+	+					+		

	Attendance	Punctuality	Attends to Task	Interractions w/ Co-workers	Exhibits Approp. Behaviors	Responsibility	Supervision	Initiation	Seeks Assistance	Frustration/Tolerance	Productive Use of Free Time	Productive Use of Work Time	Production
Student 2 Boy 2													
Math	Invalidated			(Rating Form Not Complete)									
Science	X	X	X	X	X	X					X		
Teacher	+	-	-	+	+	-					+		
Observer	+	+	-	-	-	-					-		
Student 3 Boy 3													
Industrial Arts	X		X	X	X	X	X	X	X	X			X
Teacher	+		-	-	-	-	-	-	+	-			+
Observer	+		-	-	-	-	-	-	+	-			+

TOTAL NUMBER OF LESSONS= 18

TOTAL NUMBER OF LESSONS INVALIDATED= 6

TOTAL NUMBER OF BEHAVIOR CATEGORIES= 96

TOTAL NUMBER OF DISCREPANCIES OBSERVED= 21

Chart 8

PREDOMINANT INTERESTS

	F.A. 1	2	H.E. 1	2	I.A. 1	2	3	MA. 1	MU. 1	2	SCI. 1	SOC. ST. 1
1.			X	X	X	X	X				X	
2.												
3.			X	X				X				
4.												
5.												
6.	X	X							X	X		X
7.					X	X					X	
8.	X	X							X	X		
9.			X	X	X	X	X	X			X	
10.			X	X			X				X	
CONFIGURATION OF INTERESTS BY CURRICULUM AREA												
	6 8	6 8	1 3 9 10	1 3 9 10	1 7 9	1 7 9		3 9	6 8	6 8	1 7 9 10	6

Chart 9
Northborough

+ = liked
0 = indifferent
- = disliked

RATING OF PREDOMINANT INTERESTS

Student 1

	1	2	3	4	5	6	7	8	9	10
Fine Arts 1						X		X		
Student						+		+		
Teacher						+		+		
Home Ec. 1	X		X						X	X
Student	Not	rated								
Teacher	Not	rated								
Music 1						X		X		
Student						+		+		
Teacher						+		+		
Student 2										
Fine Arts 1						X		X		
Student						+		+		
Teacher						+		+		
Home Ec. 1	X		X						X	X
Student	Not	rated								
Teacher	Not	rated								
Music 1						X		X		
Student						+		+		
Teacher						0		0		
Student 3										
Fine Arts 1						X		X		
Student						+		+		
Teacher						+		+		
Ind. Arts 1	X						X		X	
Student	0						0		0	
Teacher	0						0		0	

Rating of Predominant Interests - Northborough (cont'd)

+ = liked
0 = indifferent
- = disliked

	1	2	3	4	5	6	7	8	9	10
Music 1						X		X		
Student						+		+		
Teacher						+		+		
Student 4										
Fine Arts 1						X		X		
Student						-		-		
Teacher						+		+		
Ind. Arts 1	X						X		X	
Student	+						+		+	
Teacher	+						+		+	
Music 1						X		X		
Student						-		-		
Teacher						-		-		
Student 5										
Soc. St. 1						X				
Student						0				
Teacher						0				

Total number of factors rated = 23
Number of discrepancies = 4
Number of factors not rated = 8

Milford

+ = liked
0 = indifferent
– = disliked

RATING OF PREDOMINANT INTERESTS

	1	2	3	4	5	6	7	8	9	10
Student 1										
Science	X						X		X	X
Student	0						0		0	0
Teacher	+						+		+	+
Math			X						X	
Student			+						+	
Teacher			+						+	
Student 2										
Science	X					X			X	X
Student	+					+			+	+
Teacher	+					+			+	+
Math			X						X	
Student			+						0	
Teacher			+						–	
Student 3										
Ind. Arts	X								X	X
Student	–								–	–
Teacher	–								–	–

Total number of factors rated = 15
Number of discrepancies = 5
Number of factors not rated = 0

Chart 10

PREDOMINANT TEMPERAMENTS

	F.A. 1	2	H.E. 1	2	I.A. 1	2	3	MA. 1	MU. 1	2	SCI. 1	SOC. ST. 1
1.												
2.			X	X				X			X	X
3.	X	X										
4.												
5.												
6.												
7.	X	X							X	X		
8.			X	X	X	X	X	X			X	X
9.	X	X							X	X		
10.			X	X	X	X	X	X			X	X
CONFIGURATION OF TEMPERAMENTS BY CURRICULUM AREA												
	3 7 9	3 7 9	2 8 10	2 8 10	8 10	8 10	8 10	2 8 10	7 9	7 9	2 8 10	2 8 10

Chart 11

Northborough

+ = could adjust
0 = not sure
- = could not adjust

RATING OF PREDOMINANT TEMPERAMENTS

	1	2	3	4	5	6	7	8	9	10
Student 1 Girl										
Fine Arts 1			X				X		X	
Teacher			+				+		+	
Student			+				+		+	
Home Ec. 1		X						X		X
Teacher	Not	rated								
Student										
Music 1							X		X	
Teacher							+		+	
Student							+		+	
Student 2 Boy										
Fine Arts			X				X		X	
Teacher			+				+		+	
Student			+				+		+	
Home Ec. 1		X						X		X
Teacher	Not	rated								
Student										
Music 1							X		X	
Teacher							+		+	
Student							+		+	
Student 3 Girl										
Fine Arts			X				X		X	
Teacher			0				0		0	
Student			+				+		+	

Rating of Predominant Temperaments - Northborough (Cont'd)

+ = could adjust
0 = not sure
- = could not adjust

	1	2	3	4	5	6	7	8	9	10
Ind. Arts 1								X		X
Teacher								+		+
Student								Not	rated	
Music 1							X		X	
Teacher							+		+	
Student							+		+	
Student 4 Boy										
Fine Arts 1			X				X		X	
Teacher			+				+		+	
Student			+				+		+	
Ind. Arts 1								X		X
Teacher								+		+
Student								+		+
Music 1							X		X	
Teacher							+		+	
Student							+		+	
Student 5 Boy										
Soc. St. 1								X		X
Teacher								-		-
Student								-		-

Total number of factors rated = 32
Number of discrepancies = 3
Number of factors not rated = 8

Milford

+ = could adjust
0 = indifferent
– = could not adjust

RATING OF PREDOMINANT TEMPERAMENTS

	1	2	3	4	5	6	7	8	9	10
Student 1										
Boy										
Science		X						X		X
Teacher		+						0		0
Student		+						0		0
Math		X						X		X
Teacher		+						+		+
Student		+						+		+
Student 2										
Science		X						X		X
Teacher		0						0		0
Student		0						0		0
Math		X						X		X
Teacher		+						0		0
Student		+						0		0
Student 3										
Ind. Arts								X		X
Teacher								–		–
Student								–		–

Total number of factors rated = 14
Number of discrepancies = 0
Number of factors not rated = 0

Teacher Questionnaire Results
Evaluation of Assessment Instrument

N=9

I. In-Service	(+)	5	4	3	2	1	(-)	No Answer
a. Content was related		5	2					2
b. Arrangement of presentation		3	3	1				2
c. Preparation to field test		4	1	1				3
d. Relationship of outcome to expectations of field test		6	1					2

II. Process

a. Did the Curriculum Analysis represent the actual lesson presentation?

Yes ___9___ No ______ Not Sure ______ No Answer ______

If not, cite reasons:

b. Did the process of situational assessment interfere with lesson presentation?

Yes ___1___ No ___8___ Not Sure ______

If yes, cite reasons:

c. Did the process result in additional effort during the lesson presentation?

Yes ___6___ No ___3___ Not Sure ______ No Answer ______

If so, explain to what extent:

d. Were the variables analyzed, as present in the lesson unit, clearly observable as defined in the packet?

Yes ___5___ No ______ Not Sure ___2___ No Answer ___2___

If not, list which variables were not clearly observable:

e. Do you feel that this process could have been used for students not identified as special needs?

Yes ___9___ No ______ Not Sure ______ No Answer ______

If not, please explain:

f. How long did it take to complete the assessment rating forms? 10 min. to 2.5 hrs.
Average time: 45 min. Median 37 min.

g. Did the rating forms take a significant amount of non-classroom time?

Yes ___3___ No ___6___ Not Sure ______ No Answer ______

If yes, please indicate amount of time required:

h. If you used the assessment process for more than one class, did the time required for rating forms vary?

Yes 3 No 4 No Answer 2

If so, explain:

III. Rating Forms

a. Was the information being sought stated clearly in functional terms?

Yes 7 No Not Sure 2 No Answer

If not, please explain:

b. Did you have prior diagnostic information (testing results) on students being observed?

Yes 1 No 8 No Answer

If yes, please state what information:

c. Did you have prior information from the student's I.E.P.?

Yes 1 No 7 No Answer 1

If yes, please state what information :

IV. Instrument Format

a. Please evaluate the following suggested format:

Instructions

Curriculum Analysis

	Normal Instruction	Special Instruction	Not Able To Do	Comment
Task (stated)				
Step (stated)				
Cognitive skills (defined)				
Reasoning (defined)				
Verbal (defined)				
Numerical (defined)				

	Normal Instruction	Special Instruction	Not Able to do	Comment
Perceptual Motor (only those that apply-listed)				
Physical Demands (only those that apply-listed)				
Interests (only those that apply-listed)				
Temperaments (only those that apply-listed)				
Specific Behaviors (only those that apply-listed)				

(Format would continue with each of the remaining steps)

APPENDIX: Definition of Characteristics

Rating:	(+) 5	4	3	2	1 (-)
	3	4			

No Answer 2

b. In what ways would you change the format of the rating checklists?

APPENDIX

CURRIOULUM ANALYSIS

Instructional Area Music

Unit of Study Related to the World of Work Music as a Means of Communication and Expression

INSTRUCTIONAL MODEL

CONTENT/STUDENT'S STEPS ON TASK	INSTRUCTIONAL STRATEGIES	INSTRUCTOR'S ROLES	APPLIED OUTCOMES
1. Review through discussion the use of art and mime	Discussion Review	Leading Questioning	Identification and interpretation of symbols
2. Observe art work and discuss meaning of symbols	Visual display	Providing materials	Improve listening skills
3. Discuss importance of, and role that music plays	Audio Visuals (Records)	Operating record player	
4. Will listen to and record the words of 2 records	Writing	Observation Assisting Individually instructing	Improve writing skills
5. Will use the words to write a short paragraph showing relationship between people and personal feelings			

INSTRUCTIONS

Occupational Characteristics Checklists

There are six checklists included with the assessment packets that relate to occupational characteristics. They are as follows:

1. Task Performance
2. Cognitive Skills - Reasoning
3. Verbal
4. Numerical
5. Perceptual/Motor Skills
6. Physical Demands

Only those characteristics listed are to be rated.

Each of the checklists are rated using"able to do task with normal instruction", "able to do task with special instruction", and "unable to complete task". Normal instruction is defined as assistance that could be expected to occur with any student at this grade level doing the task as stated. It is important to rate the characteristics only when that characteristic is clearly observable by an operational behavior on the part of the student. One should not record any rating based on assumption or based on any activity not directly related to a step in the task.

On the remaining five checklists, each characteristic is referenced directly to a step in the task. For example, step one on the "task performed" corresponds to step one of each of the remaining five checklists. It would, therefore, be impossible to rate the step performed "with normal instruction" and rate any of the corresponding characteristics as "with special instruction" or "unable to complete the task".

When in doubt about the meaning of any characteristic, refer directly to the operational definitions at the end of the packet. Be sure to reference any ratings or definitions to the appropriate step in the task.

Temperament Checklist

There are ten temperaments which are defined as operational statements and are included at the end of this packet. A temperament measures the ability to adapt to "specific types of job-worker situations". Each step of the task has been analyzed to determine which temperament factor is involved. Each temperament is rated against "able to adjust", "no great feeling", and "not able to adjust".

1. Rate only those temperaments which are directly related to the task beginning with step one.

2. Record the student's rating only where the student has responded with a definite verbal statement using the three variables.
3. Do not record any self rating of the student unless interaction occurs between you as the recorder and the student.
4. Base your recording of the student's ability to adapt on the observable behavior of the student.
5. Where your assessment and the student's response is not the same, attempt to resolve the difference by further interaction with the student.

Interests Checklist

There are ten interests which are defined as operational statements and are included at the end of this packet. Each step of the task has been analyzed to determine which interest factors are involved. Each interest is rated against five variables from "like very much" to "dislike very much".

1. Rate only those interests which are directly related to the task beginning with step one.
2. Record the student's rating only where the student has responded with a definite verbal statement of interest using the five variables.
3. Do not record any self rating of student interest unless interaction occurs between you, as the recorder, and the student.
4. Base your recording of the interest of the student on the observable behavior and attitude of the student.
5. Where your assessment and the student's response are not the same, attempt to resolve the difference by further interaction with the student.

TASK PERFORMANCE CHECKLIST

TASK: Music as a Means of Communication and Expression

Step	Definition	Able To Do With Normal Instruction	Able To Do With Special Instruction	Not Able To Do	Verify Nature Of Assistance
1.	Review through discussion the use of art and mime				
2.	Observe art work and discuss meaning of symbols				
3.	Discuss importance of and role that music plays				
4.	Will listen to and record the words of 2 records				
5.	Will use the words to write a short paragraph showing				
	relationship between people and personal feelings				

COGNITIVE SKILLS CHECKLIST

Reasoning

TASK: Music as a Means of Communication and Expression

Step	Definition	Able To Do With Normal Instruction	Able To Do With Special Instruction	Not Able To Do	Verify Nature Of Assistance
1.	Comprehension (generalize, verbalize)				
2.	Comprehension (verbalize)				
3.	Comprehension (verbalize)				
4.	Copying/ comparing (recognize, record)				
5.	Comprehension (interpret, generalize, verbalize)				

COGNITIVE SKILLS CHECKLIST

Verbal

TASK: Music as a Means of Communication & Expression

Step	Definition	Able To Do With Normal Instruction	Able To Do With Special Instruction	Not Able To Do	Verify Nature Of Assistance
1.	Listening (comprehension) Speaking (combine)				
2.	Reading (comprehension) Speaking (combine)				
3.	Listening (comprehension) Speaking (combine)				
4.	Listening (recall) Writing (spell)				
5.	Writing (formulate)				

COGNITIVE SKILLS

Numerical

TASK: Music as a Means of Communication & Expression

Step	Definition	Able To Do With Normal Instruction	Able To Do With Special Instruction	Not Able To Do	Verify Nature Of Assistance
1.	NA				
2.	NA				
3.	NA				
4.	NA				
5.	NA				

PERCEPTUAL/MOTOR SKILLS CHECKLIST

TASK: Music as a Means of Communication & Expression

Step	Definition	Able To Do With Normal Instruction	Able To Do With Special Instruction	Not Able To Do	Verify Nature Of Assistance
1.	NA				
2.	Form Perception				
3.	NA				
4.	NA				
5.	Clerical perception				

PHYSICAL DEMANDS

TASK: Music as a Means of Communication and Expression

Step	Definition	Able To Do With Normal Instruction	Able To Do With Special Instruction	Not Able To Do	Verify Nature Of Assistance
1.	Sitting Talking/hearing				
2,	Sitting Seeing (acuity-far) Hearing/talking				
3.	Sitting Talking/hearing				
4.	Sitting Hearing				
5.	Sitting Handling Seeing (acuity-near)				

INTEREST CHECKLIST

TASK: Music as a Means of Communication & Expression

Step	Description	Like Very Much		Like		Indifferent		Dislike		Dislike Very Much	
		Student	Teacher	Student	Teacher	Student	Teacher	Student	Teacher	Student	Tea
1.	(6) Activities involving communication of information										
2.	(6) Activities involving communication of information										
3.	(6) Activities involving communication of information										
4.	(6) Activities involving communication of information										
5.	(6) Activities involving communication of information										

TEMPERAMENT CHECKLIST

(Adaptability)

TASK: Music as a Means of Communication & Expression

Step	Description	Able to Adjust Student	Able to Adjust Teacher	No Strong Feelings Student	No Strong Feelings Teacher	Not Able to Adjust Student	Not Able to Adjust Teacher
1.	(9) Interpreting and expressing ideas						
2.	(9) Interpreting and expressing ideas						
3.	(9) Interpreting and expressing ideas						
4.	(1) Change						
5.	(9) Interpreting and expressing ideas						

INSTRUCTIONS

Behaviors Specific To Task

These behaviors are specific to each step of the task and may be found to occur several times through the task.

In using the form, one must observe and note if a student is or is not exhibiting the appropriate behaviors during each step of the task by marking one of the two columns.

If the student does not exhibit appropriate behavior, make sure to note in the column entitled,"Comments", what behaviors he/she did exhibit. Also, note the number of times a behavior is exhibited.

General Work Readiness Behaviors

After completing the Specific Behaviors Checklist, one must transfer the information onto the General Work Readiness Behaviors Checklist. To do this:

1. Locate the General Work Readiness Behaviors column on the Specific Behaviors Checklist.
2. Note the first behavior in that column, (i.e., Attendance) and the behaviors specific to the task (i.e., Comes to Class to Participate on Task).
3. Locate the same behavior on the General Work Readiness Behaviors Checklist (i.e., Attendance).
4. Read down the list of behaviors until you find a behavior similar to that of the specific behavior (i.e., Comes To Work Without Absence).
5. Mark one of the three appropriate columns on the General Work Readiness Behaviors Checklist, based on the measurement the student received on the Behaviors Specific to Task Checklist (exhibited appropriate or did not exhibit appropriate behaviors). Interpret and decide if the student's inappropriate behaviors were minimal or prevented completion of the task.

In the conversion from Specific to General, measure only those behaviors exhibited during task steps.

Music

Step	General Work Readiness Behaviors	Behaviors Specific To Task	Exhibits Appropriate Behaviors	Does Not Exhibit Appropriate Behaviors	Comments # of Times Behaviors Exhibited
1.	Attendance	Comes to class to participate on task			
	Punctuality	Comes to class on time			
	Attention to task	Follows, continues and focuses on discussion			
	Interactions with co-workers	Verbalizes relating to subject Listens to peers Responds in a polite manner			
	Exhibits appropriate behaviors	When interacting is polite and courteous Does not exhibit disruptive behaviors			
2.	Attends to task	Focuses on art work Follows discussion			
	Interactions with co-workers	Verbalizes relating to subject Listens to peers Responds in a polite manner			
	Exhibits appropriate behaviors	When interacting is polite and courteous Does not exhibit disruptive behaviors			
3.	Attention to task	Follows, continues and focusses on discussion			
	Interactions with co-workers	Verbalizes relating to subject Listens to peers Responds in a polite manner			
	Exhibits appropriate behaviors	When interacting is polite and courteous Does not exhibit disruptive behaviors			
4.	Attends to task	Follows instructions for listening to records Listens to records Writes down words from songs			

Music

Step	General Work Readiness Behaviors	Behaviors Specific To Task	Exhibits Appropriate Behaviors	Does Not Exhibit Appropriate Behaviors	Comments # of Times Behaviors Exhibited
4.	Exhibits appropriate behaviors	Does not exhibit disruptive behaviors			
	Responsibility	Carries out task, writes words from songs			
	Initiation	Initiates work on task as soon as directions given			
5.	Attends to task	Listens to instructions Follows instructions Writes a short paragraph using words from songs			
	Exhibits appropriate behaviors	Does not exhibit disruptive behaviors			
	Responsibility	Carries out task, writes words from songs			
	Supervision	Works without constant supervision If necessary, reacts appropriately			
	Initiation	Works without prompting			
	Seeks assistance	Only when necessary			
	Frustration Tolerance	Attempts to solve problems before seeking assistance			
	Productive use of work time	Uses work time appropriately			
	Production	Produces work within set limits			

GENERAL WORK READINESS BEHAVIORS

BEHAVIOR	Exibits Appropriate Behaviors While Completing Task	Exhibits Minimal Inappropriate Behaviors While Completing Task	Exhibits Inappropriate Behaviors Preventing Completion of Task	Comments (# of times Behavior(s) Exhibited During Task Period
ATTENDANCE: Arrives to designated places, meetings, assignments without absence				
Comes to work without absence				
PUNCTUALITY: Arrives to designated places, meetings, assignments on time				
Comes to work on time				
ATTENDS TO TASK: Listens to directions/ instructions				
Follows instructions				
Continues on task until complete				
Able to focus on task with little distractability (self-interruptions)				
INTERACTIONS WITH CO-WORKERS: In interacting in a group: Allows co-workers a chance to complete their assigned task without instruction, criticism				
Gives assistance only if asked				

BEHAVIOR	Exhibits Appropriate Behaviors While Completing Task	Exhibits Minimal Inappropriate Behaviors While Completing Task	Exhibits Inappropriate Behaviors Preventing Completion of Task	Comments (# of times Behavior (s) Exhibited During Task Period
INTERACTIONS WITH CO-WORKERS: Gives only the assistance necessary to clear co-worker's problem-confusion				
Offers some assistance if co-worker has expressed or exhibited difficulty				
Verbalizes, communicates relating to task				
Asks for something in an appropriate manner, politely, friendly				
Listens to co-workers				
Responds in a polite, appropriate manner				
Responds by giving, if possible, what co-worker has requested				
EXHIBITS APPROPRIATE BEHAVIORS: Waits patiently				
Follows rules of classroom, work area, building, etc.				
When interacting, is polite, courteous				
Does not exhibit disruptive behaviors (i.e. running, yelling, swearing, grabbing, etc.				

BEHAVIOR	Exhibits Appropriate Behaviors While Completing Task	Exhibits Minimal Inappropriate Behaviors While Completing Task	Exhibits Inappropriate Behaviors Preventing Completion of Task	Comments (#of times Behavior (s) Exhibited During Task Period
EXHIBITS APPROPRIATE BEHAVIORS: Observes safety rules				
RESPONSIBILITY: Carries out/performs assigned tasks				
Performs assigned tasks on schedule				
Handles/cares appropriately for materials, tools, etc.				
Takes care of/handles oneself in appropriate way				
SUPERVISION: Need of: Works without constant supervision - working at a constant and consistent rate without assistance				
Reaction to: Responds appropriately to supervision				
Accepting supervision if justified-assistance, direction, criticism				
INITIATION: Initiates work on task without being prompted-if directions known previously				

BEHAVIOR	Exhibits Appropriate Behaviors While Completing Task	Exhibits Minimal Inappropriate Behaviors While Completing Task	Exhibits Inappropriate Behaviors Preventing Completion of Task	**Comments** (# of times Behavior (s) Exhibited During Task Period
INITIATION: Initiates work on task as soon as directions/ instructions are given				
SEEKS ASSISTANCE: Seeks assistance only when necessary- after making all possible attempts to resolve the problem on one's own				
FRUSTRATION TOLERANCE: Continues to work on task in face of obstacles or set-backs				
Makes an attempt or several attempts in order to solve problem- after seeking assistance				
PRODUCTIVE USE OF FREE/ NON-WORK TIME: Seeks out appropriate activities/tasks to do				
Selects something constructive to do- future work tasks, past-incomplete, etc.				
Conducts self in an appropriate manner- not conversing with others still working				

BEHAVIOR	Exhibits Appropriate Behaviors While Completing Task	Exhibits Minimal Inappropriate Behaviors While Completing Task	Exhibits Inappropriate Behaviors Preventing Completion of Task	Comments (# of times Behavior (s) Exhibited During Task Period
PRODUCTIVE USE OF WORK TIME: Uses the work time to perform necessary/assigned tasks				
Eliminates unnecessary work tasks				
PRODUCTION: Produces to best of ability				
Produces within set limits				
Produces equal amounts for each period w/in %				
Produces % correctly				
Quality of work is to best of ability				

"END OF DOCUMENT"